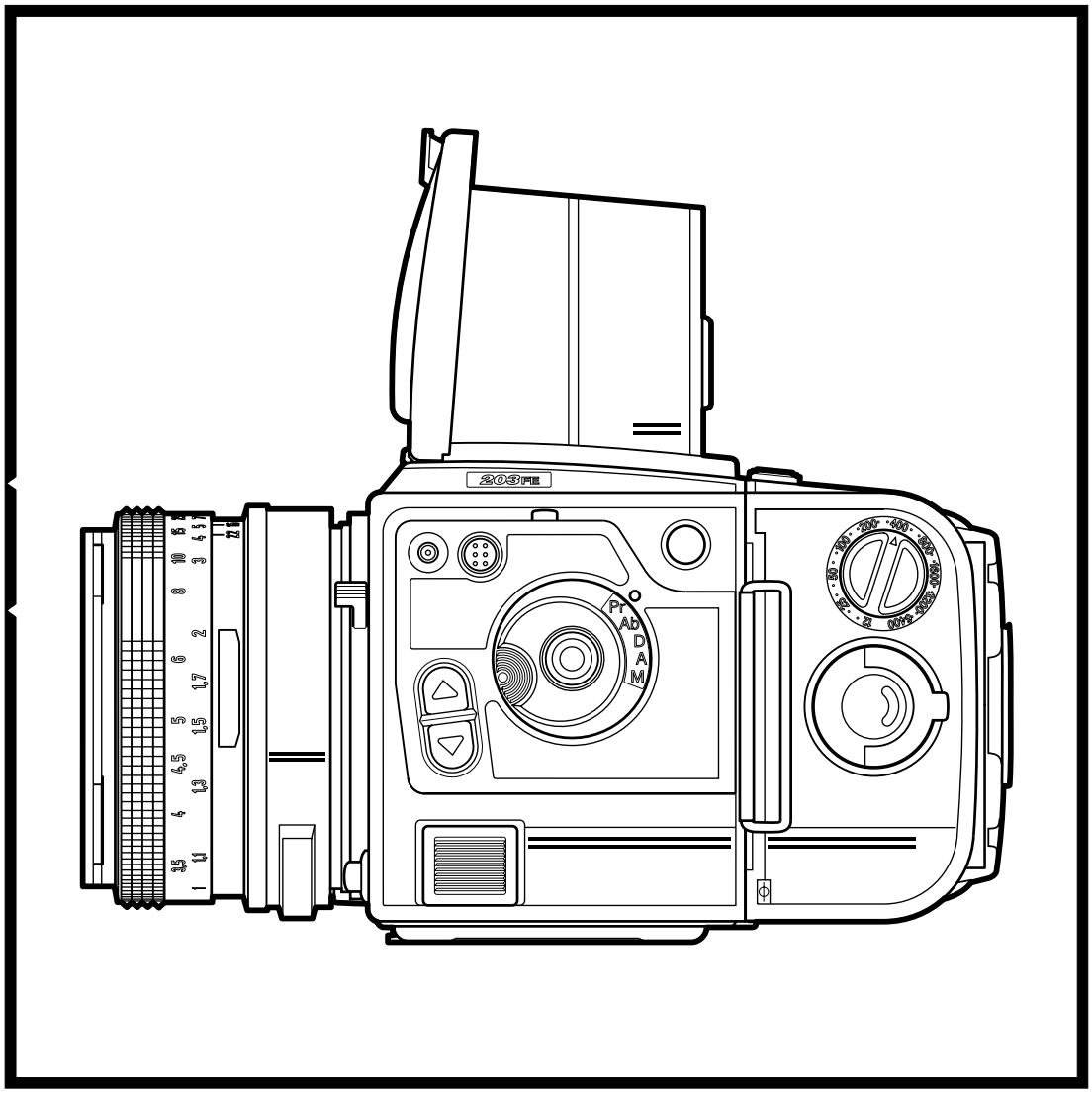
HASSELBLAD

Service Manual

203FE

205FCC 205TCC



May 1997

Victor Hasselblad AB

Göteborg Sweden

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Camera body 203FE - 205FCC - 205TCC

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03/92	New Service Manual
05/92	Service Manual 205TCC System Components
04/93	Some more hand tools are now available
05/93	The release button and buffer have recently been modified - 205TCC
12/93	Just for your information
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09/94	The control panel has recently been redesigned - 205TCC
10/94	New camera body - 203FE
03/95	New tool - Support 904020
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14/95	Mirror and focusing screen adjustment 200 series cameras
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01/96	Contact flex modified - 203FE
03/96	Driving arm failed to latch - 203FE and 205FCC
12/96	Tripod foot adapter/kits
04/97	Light seal foil modified - 200 series cameras
13/98	New Service Manual - 203FE, 205FCC and 205TCC
08/99	New control panel - 205TCC
13/99	Modified parts - 200 series cameras
01/00	New CD-ROM - Version 1.2

14/00	Discontinued parts - 200 series cameras
01/01	Modified magazine hook - 203FE and 205FCC
04/01	New CD-ROM - Version 2.0

Camera body 203FE - 205FCC - 205TCC

Design:	Medium format single reflex camera with built-in TTL selective meter electronically connected to FE lenses and E magazines. Interchangeable lenses, film magazines, viewfinders and focusing screens.
Shutter: (203FE/205FCC)	Electronically controlled mechanical focal plane shutter with release solenoid system. Horizontally running textile curtains. Shutter speed range 90 s - 1/2000 s and B. In manual mode up to 34 minutes. Fully mechanical C setting for lenses with built-in leaf shutters. Flash synchronization at all speeds from B to 1/90 s.
Shutter: (205TCC)	Electronically controlled mechanical focal plane shutter with release solenoid system. Horizontally running textile curtains. Shutter speed range 16 s - 1/2000 s and B. Fully mechanical C setting for lenses with built-in leaf shutters. Flash synchronization at all speeds from B to 1/90 s.
Lens mount:	Hasselblad bayonet mount for FE, F, CF and C lenses. Contacts for data-bus communication with the FE lenses.
Viewfinder:	Focusing hood with 4 x magnifier, interchangeable with magnifying hood and prism viewfinders with or without exposure meter. Acute-Matte focusing screen interchangeable with other Hasselblad focusing screens. Illuminated flash and warning symbols.
Display:	LCD display with all relevant exposure and operational data. Switch-controlled low light illumination.
Winding & film advance:	Manual single turn winding crank. Simultaneous shutter cocking and film advance. The crank is interchangeable with the Hasselblad Winder for a frame rate of up to 1.3 fps.

Camera body 203FE - 205FCC - 205TCC

Exposure meter: (203FE)	TTL metering at full aperture with FE lenses. High sensitivity silicon photocell. Selective meter area approximately 20% of the image area. Metering range EV 0.5 to EV 21.5 at ISO 100/21° and f 2.8. Activated 16 s after release of any operational button.
Exposure meter: (205FCC/205TCC)	TTL metering at full aperture with FE lenses. High sensitivity silicon photocell. Spotmeter area approximately 1% of the image area. Angle of view from approximately 1° to 7° depending on the lens focal length. Metering range EV -1 to EV 20 at ISO 100/21° and f 2.8. Activated 16 s after release of any operational button.
Exposure functions: (203FE)	Aperture priority automatic exposure, automatic flash control and full manual control. Exposure compensation ± 5 EV in 1/3 EV increments. AE-lock.
Exposure functions: (205FCC/205TCC)	Aperture priority automatic exposure, automatic flash control and full manual control. Exposure compensation ± 5 EV in 1/4 EV increments. AE-lock.
Operating modes: (203FE)	Programming, Automatic bracketing, Differential, Automatic and Manual mode.
Operating modes: (205FCC)	Programming, Automatic bracketing, Differential, Zone and Manual mode.
Operating modes: (205TCC)	Automatic, Programming, Differential, Zone and Manual mode.
Film speed range:	ISO 12/12° - 6400/39°, selected with film speed dial on E and CC magazines or set in programming mode.

Camera body 203FE - 205FCC - 205TCC

Flash control: (203FE/205FCC)	Center weighted TTL/OTF flash exposure meter. Full dedicated flash control with inhibited flash triggering at shutter speeds faster than 1/90 s. Flash control film speed range ISO 25 - 1000.
Flash control: (205TCC)	Center weighted TTL/OTF flash exposure meter. Full dedicated flash control with automatic shutter speed reset to 1/90 s at faster speed settings. Inhibited flash triggering at shutter speeds settings faster than 1/90 s with non-dedicated flash units. Flash control film speed range ISO 25 - 1000.
Self timer:	Default delay 10 s. Programmable delay in 12 steps from 2 s to 60 s.
Battery:	6 volt, type PX28 Lithium.
Tripod mount: (203FE/205FCC)	Quick coupling plate with 1/4" and 3/8" socket thread.
Tripod mount: (205TCC)	Quick coupling plate with 1/4" socket thread.
External dimensions: (203FE/205FCC)	91L x 118W x 110H (3 9/16 x 4 21/32 x 4 1/32 in).
External dimensions: (205TCC)	91L x 118W x 108H (3 9/16 x 4 21/32 x 4 1/4 in).
Weight:	745 g.

Camera body 203FE - 205FCC - 205TCC

Focal length:		71.4 mm ± 0.03 mm
Front key angle:	Cocked position	8° - 9° 3 Ncm
	Overtravel	12° - 14° 14 Ncm
Front gear:	Pre-tension of spring	3 turns (released position)
Magnets:	Minimum hold	2 Ncm
Shutter:	Accelerating stretch	6.5 - 8.1 mm
	Slot	0.2 - 1.0 mm
	Travel times	9.5 - 9.7 ms at 1/2000 s (0 ± 0.07 ms)
	Speeds 1 sec - 1/60	± 0.1 EV
	Speeds 1/90 - 1/2000	± 0.3 EV
Light meter:	All settings	± 0.3 EV
Flash meter:	All settings	± 0.3 EV
Flash sync:	Delay	0 - 0.20 ms
Current consumption:	On	max 10 mA at 5.6 V
	Off	max 20 uA at 5.6 V

Camera body 203FE - 205FCC - 205TCC

Switch functions

PPS = Pressure point switch

Makes when the release button is pressed to the pressure point. Activates the camera. A pre-locked light value is unlocked when the button is released.

LRS = Late release switch

Makes when the release button is fully pressed. Starts together with PPS an exposure.

HPS = Home position switch

Makes when the camera is fully cocked. Indicates together with FSS that the camera is tensioned. If HPS is open, the camera can not be activated.

FSS = First curtain sync switch

Will be switched off when the first curtain is released. Indicates together with HPS that the camera is tensioned. If FSS is open, the camera can not be activated.

SSS = Second curtain sync switch

Will be switched off when the second curtain is released. Must be closed, otherwise the warning function: Lo Flash and Hi Flash in C-mode will not work.

FKS = Front key switch

Makes when the camera is tensioned. Is switched off when the mirror goes up and at that time also prevents new light values to be stored. If FKS is not switched off the selftimer does not work.

MRS = Mirror release switch

Makes when the mirror release button is fully pressed. When the button is pressed once more, the selftimer starts. In B-mode the second curtain will be released when MRS is switched off.

ELS = Exposure lock switch

Activates the camera when pressed. When released, a light value is stored.

Camera body 203FE - 205FCC - 205TCC

Switch functions

AS+ = Adjustment switch +

Exposure compensation etc.

AS- = Adjustment switch -

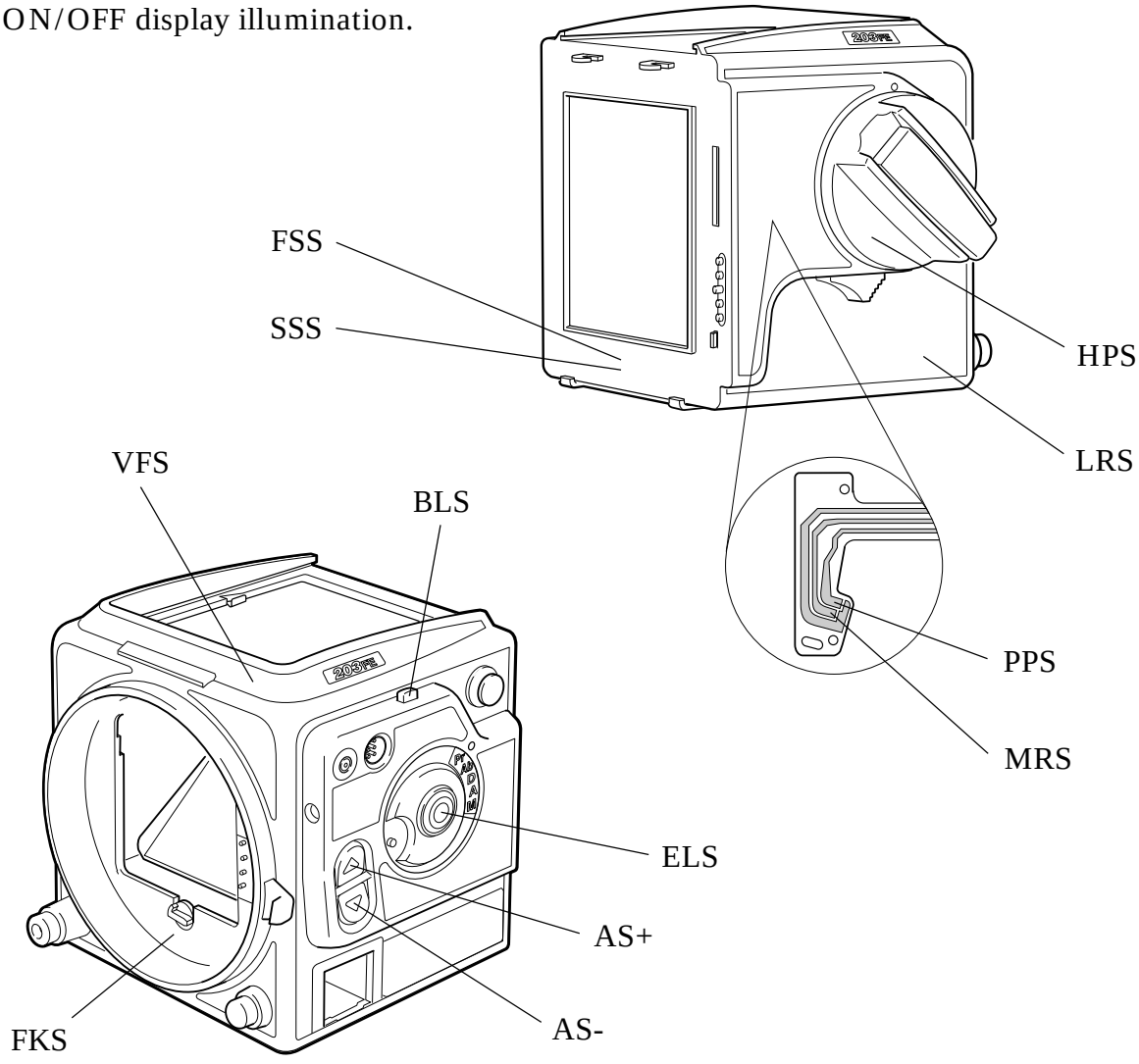
Exposure compensation etc.

VFS = View finder switch

Is switched off when a prism finder is mounted on to the camera and at the same time mirror turns the display.

BLS = Back light switch

ON/OFF display illumination.



Camera body 203FE - 205FCC - 205TCC

Link to: VHABSTS

CAUTION! When handling the circuit boards a grounded bench mat and a wrist strap must be used to prevent ESD damage.

Carry out the following checks/adjustments when a camera body is reassembled after a repair.
Note! Point 1 - 7 without camera shell.

1. The camera body focal length is checked by using the gauge V-2229 together with the ruler and indicator clock. The focal length is 71.40 mm ± 0.03 mm. Adjustment slots on the chassis and the bottom mechanism plate.

2.* Secure the camera in the gauge V-2229 by the adapter 904759. Check the 45º mirror angle with the sighting tube. The image seen, should be symmetrical. Adjust, if necessary, the four supports in the mirror box by using the tools 901046 (front supports) and 904018 (rear supports).

3.* Check the flatness of the screen. Use the screen adapter V-4705 and the ruler with the indicator clock. The same measurement should be obtained at all four corners. Adjust, if necessary, by the four screws (Pos No. 28, page 15).

4.* After the screen is correctly levelled the height must also be checked. Use the collimator V-4151, the screen adapter V-4705 and the microscope V-2236.
The image seen in the microscope should be the red line central between the two green lines. Recheck the flatness.

5. Use the tool 902658 or V-2075/2151 for checking of the front key angle. Adjust if necessary. Cocked position 8° - 9° 3 Ncm. Overtravel 12° - 14° 14 Ncm.

6. Temporarily fit the control panel to the camera body and secure it with a piece of tape. Use the nut driver 903755 or 903474.

7. Connect the camera body to the Service Test System and go through all checks in the given order according to the 203/205 menu. Note! pos. 7:1 to 7:7 without sensor head and light source.

7:1 CAMERA STATUS. Make sure all switches are working properly.
Note! The speed ring in C-position.

If the contact flex has been removed at any time, the timing between the pre-release switch (PRS) and the mirror must be checked.
Mount the test shell, 905002, with four screws. Fit the exposure gauge V-2354 in the release button and slowly rotate the micrometer clockwise and observe when the mirror is released. At the same time (not before) the PRS should change from "open" to "closed" on the screen. A slight delay is acceptable. This corresponds to 1.5 divisions on the scale.
Adjust, if necessary, by altering the position of the rear section of the contact flex

containing the PRS. Untighten the two screws (Pos. No. 12, page 9) and carefully change the position of the flex in the direction required. Tighten the screws and recheck.

7:2 PANEL. Check the control panel functions.

7:3 SPEED RING. Make sure all speed ring settings are indicating correctly.

7:4 DISPLAY. Check the display indications. Note! To get the flash indicator to light up, the sync cable must be connected.

7:5 CURRENT. Check the consumption (max. 10 mA at 5.6 volt) and the drain (max. 20 uA at 5.6 volt).

7:6 LENS. Check the communication between a lens and the camera body. (F-stops)

7:7 MAGAZINE. Check the communication between a magazine and the camera body.

7:8 SHUTTER. Start by adjusting the travel times. Use 1/2000 sec. and adjust the spring housing until both curtains have a speed between 9.5 - 9.7 ms. (0 ± 0.07 ms). At this point, also make a final adjustment of the braking mechanism if necessary. The brake is checked as follows: Release the camera. Rotate the 2nd shutter gear (Pos No. 25, page 17) and count the number of times the catch (Pos No. 4, page 18) and the brake plate (Pos No. 3, page 18) engage. (Min. 4 times). For an adjustment use the nut driver 903755 or 903474. (See page 3:4).

Check/adjust the speed 1/2000 sec. Use the "shutter speed" potentiometer for an adjustment. (See page 3:4). Max. deviation ± 0.3 EV.
Check the speed 1/1000 sec. Max. deviation ± 0.3 EV.

7:9 LIGHT METER. Check/adjust the light meter. Use the "light meter" potentiometer for an adjustment. (See page 3:4). Max deviation ± 0.3 EV. Do not use any other light output except EV 15, since the camera is not built in to the shell.

7:10 FLASH SYNC. Check/adjust the flash sync. The delay is adjusted to 0 - 0.20 ms by altering the position of the first sync contact. (See page 3:4).

7:11 FLASH METERING. Check/adjust the flash meter. Use the "flash meter" potentiometer for an adjustment. (See page 3:4). Max. deviation ± 0.3 EV. Use the setting ISO 100 and light output EV 15.

7:12 C-POSITION. Check/adjust the C-position. It is adjusted by extending/shortening the release arm 103389. (See page 3:4).

Camera body 203FE - 205FCC - 205TCC

8. Remove the control panel. Make sure the four centering screws (Pos. No. 16 and 19, page 11) are screwed in and put the camera body in to the shell.
Do not forget the pre-release button.

9. After aligning the rear plate/shell tighten the two rear screws (Pos No. 32, page 5) and adjust, if necessary, the horizontal relationship between the speed ring and the shell by the screws (Pos No. 16, page 11) which are accessible through the shell.

10. Adjust the vertical relationship between the speed ring and the shell by the screws (Pos No. 19, page 11) which are accessible through the shell and then tighten the two front screws (Pos No. 34, page 5).

11. Check the upper edge alignment of rear plate and shell. Adjust, if necessary, by the two screws (Pos No. 31, page 9) which are accessible through the shell .
Note! The rear edge of the shell must not protrude over the rear plate at any point.

12. Remount the control panel, the winding crank mechanism, the tripod foot, the speed ring grip and the inner cover. (The inner cover by using the tool 901061).

13.* When the camera body is fully reassembled, recheck the focal length, the 45° mirror angle and the screen position.

14. Connect the camera body to the Service Test System once again and go through <u>all</u> checks once more. Minor adjustments are sometimes necessary to make.
At this stage, it is also possible to use different light outputs when checking the light and flash meter since the camera body is mounted in to the shell.

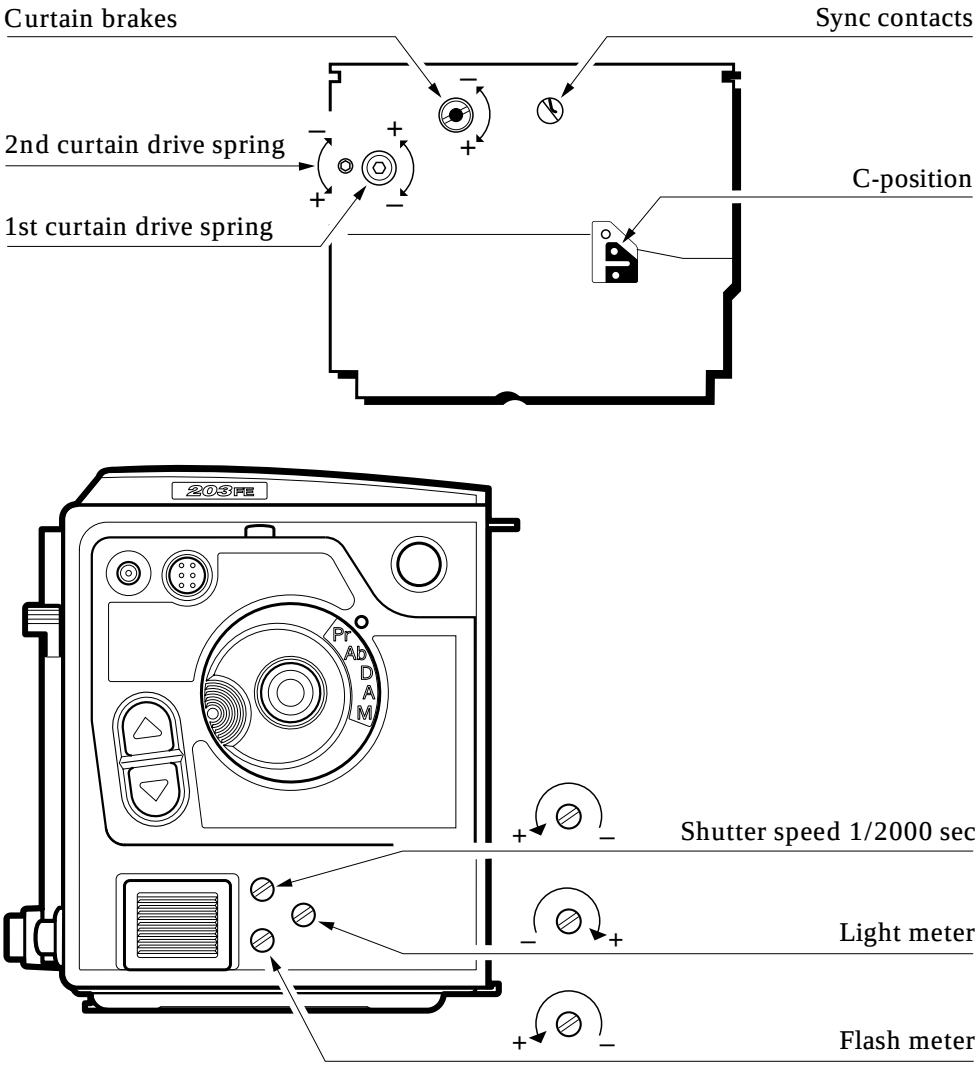
* The 200 series cameras are built slightly different from the 500 series cameras concerning the focusing screen adjustment. Due to the use of high precision test equipment at the assembly line, deviations from perfect 45º mirror angle is compensated for when adjusting the focusing screen position. Doing so we assure minimum focusing differences over the full image format between the images on the focusing screen and on the film.

The result of the factory screen adjustment is, that the screen position may not be totally horizontal when tested in the gauge V-2229. This is still quite in order.

When servicing the 200 series cameras we recommend not to change the mirror angle, provided it is in tolerance when checked with the sighting tube in gauge V-2229. Deviations from perfect 45º angle has already been accompanied by non-horizontal focusing screen position.

However, if the mirror angle is out of tolerance, adjustment has to be made using the current procedures. (Service Info No. 14/1995)

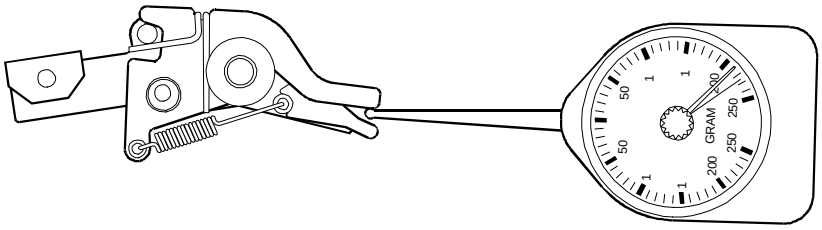
Camera body 203FE - 205FCC - 205TCC



Camera body 203FE - 205FCC - 205TCC

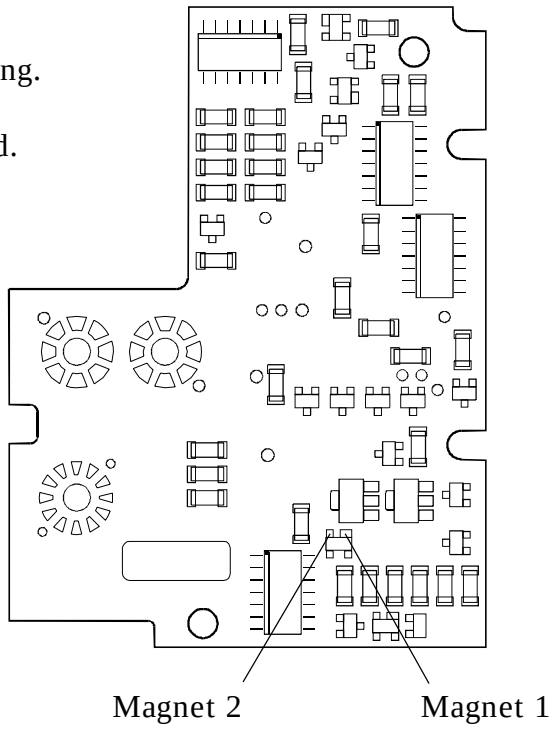
Magnet hold capability

The magnet hold capability can be checked according to the diagram below. A suitable scale, like the ZZ88, should be used. When measuring, it must indicate minimum 2 NCM (200 gram) before each latching lever is released.
If indicating less then 2 NCM, the magnets should be cleaned and then rechecked. If still less then 2 NCM after cleaning the Bottom mechanism plate, compl. (Part No. 105028) must be changed. Magnets and latching levers are not available as spare parts due to sensitive calibration procedures.



VHAB Tool No. = ZZ88, Scale

The magnets can be released from the main circuit board when troubleshooting. Use an external DC power supply and apply 5 volt to the test points indicated. Do not forget the grounding.



Camera body 203FE - 205FCC - 205TCC

Tool No.	Description	Used for
V-2211	Pin driver	Fitting the locating pin in the front plate and the front gear bracket
V-2229	Focal length gauge	Adjustment of the focal length, the mirror 45ºangle and the focusing screen
V-2236	Microscope	Focusing screen adjustment
V-2354	Exposure gauge	Adjustment of the timing between the pre-release switch (PRS) and the mirror
V-4151/52	Focusing tester	Focusing screen adjustment
V-4705	Focusing screen adapter	Focusing screen adjustment
901 044	Centering pin	Positioning the front gear bracket
901 045	Centering pin	Positioning the front gear bracket
901 046	Bender	Adjustment of the mirror 45º angle
901 061	Mounting tool	Mounting the inner cover
902 658	Key angle gauge	Adjustment of the front key angle
903 282	Key	Securing a nut on the bottom plate
903 570	Shutter gear holder	Securing the shutter gears when fitting the curtains

Camera body 203FE - 205FCC - 205TCC

Tool No.	Description	Used for
903 630	Bender	Adjustment of the late release switch
903 755	Nut driver	Fitting the control panel and the contact flex to the main circuit board
903 940	Key	Cocking the curtains before the intermediate gear is fitted
904 018	Bender	Adjustment of the mirror 45º angle and the auxiliary mirror position
904 020	Supporting tool	Protecting the control panel and the main circuit board when working on the right hand side of the camera
904 759	Adapter	To be used in combination with focal length gauge V-2229
905 002	Test shell	Adjustment of the timing between the pre-release switch (PRS) and the mirror
970 600	Service Test System	See page 4:3
905 138	Light box	See page 4:3 (optional)
ZZ89	Driver	To tighten the special type allen screw holding the chassis and the front plate together

Camera body 203FE - 205FCC - 205TCC

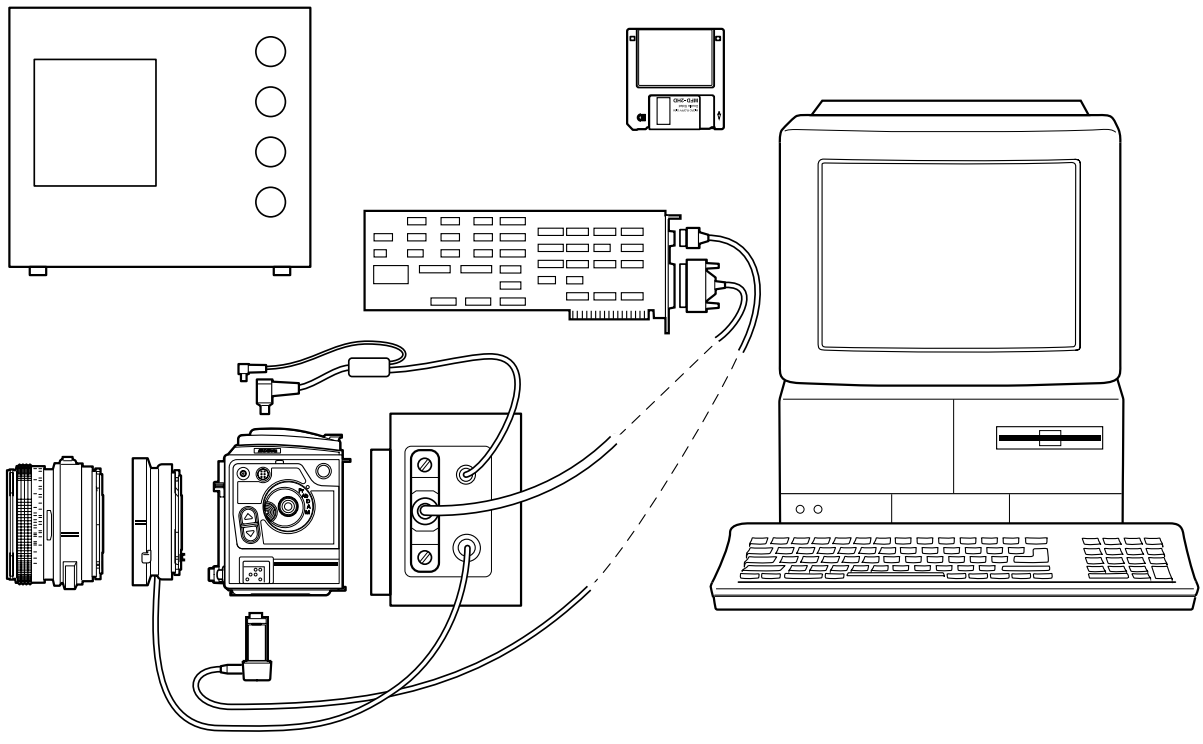
The PC based Service Test System has been developed for testing the 200 series cameras in Hasselblad authorized service centres. In addition it can be used for testing some functions on the 500 and 2000 series cameras and in the PME viewfinder.

The Service Test System contains the following:

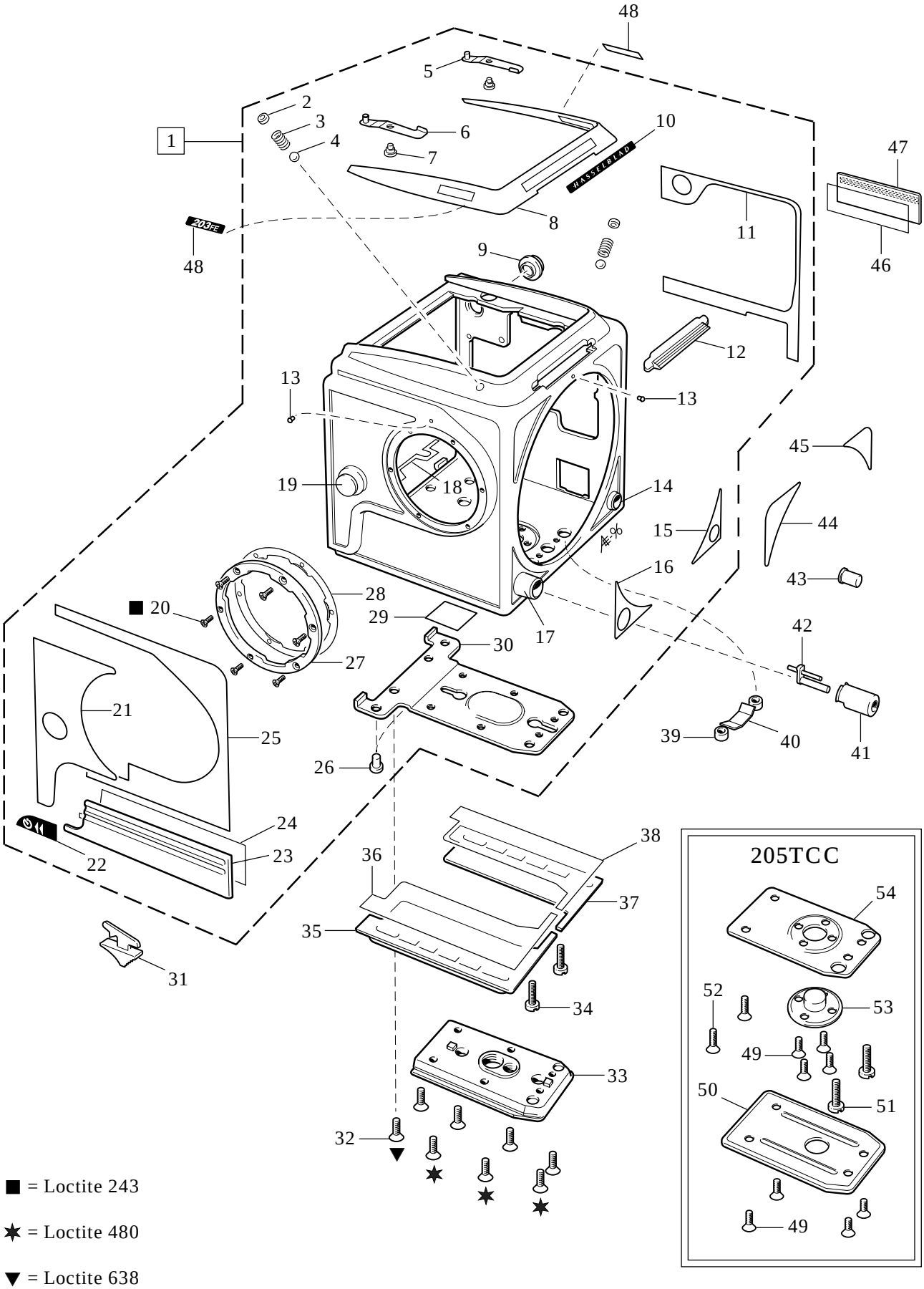
970 663	Diskette (3.5") containing the software
970 630	PC-board (full length ISA)
970 610	Sensor
663 83	Protective cover for Sensor
970 711	Extension tube
970 649	Battery compartment cable
970 648	Sensor cable
55034/23	Sync cable
	Instruction manual

Additional components required are the following:

Light box with LV15 capability - for instance Hasselblad 905 138
PC - IBM compatible
Planar FE80 mm lens
Planar CF80 mm lens



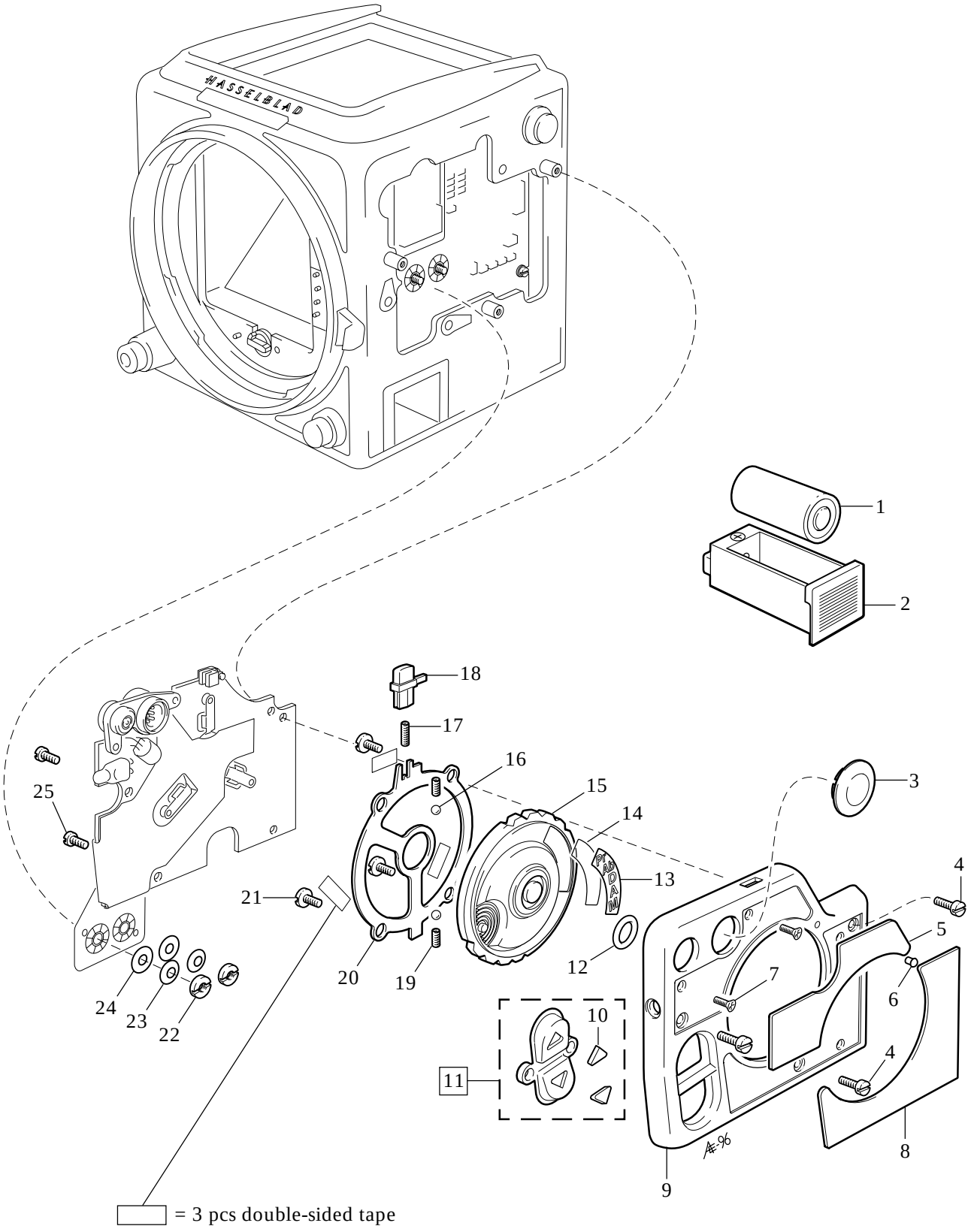
203FE - 205FCC - 205TCC



Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	105 025	Shell, complete (chrome)	Part No. 105026 (black)
2	2	12 978	Plate	
3	2	815 604	Spring	
4	2	809 120	Steel ball	
5	1	13 907	Holder, left	
6	1	13 906	Holder, right	
7	2	835 001	Pin	
8	1	105 475	Leather	
9	1	13 466	Strap button	
10	1	13 190-1	Name plate	
11	1	105 511	Leather	
12	1	105 365	Display window	
13	2	103 536	Index	
14	1	105 498	Bushing	
15	1	103 510	Leather	
16	1	103 509	Leather	
17	1	105 357	Bushing	
18	1	103 413	Spacer	
19	1	105 935	Strap button	
20	6	829 304	Screw	
21	1	105 509	Leather	
22	1	105 432	Plate	
23	1	107 390	Grip	
24	1	105 874	Tape	
25	1	105 862	Leather	
26	2	831 502	Rivet	
27	1	103 387	Bayonet	
28	1	103 388	Spring	
29	1	22 514	Reflection protector	
30	1	40 387	Support plate	
31	1	103 419	Pre-release	
32	8	829 760	Screw	
33	1	30 763	Tripod foot	
34	2	820 781	Screw	
35	1	30 762	Support, right	
36	1	105 872	Tape	
37	1	30 760	Support. left	
38	1	105 870	Tape	
39	2	810 620	Spacer	
40	1	103 424	Spring	
41	1	105 437	Release button	
42	1	105 953	Buffer	
43	1	13 139	Lens release button	
44	1	103 507	Leather	
45	1	103 508	Leather	
46	1	105 876	Tape	
47	1	105 956	Grip	
48	2	107 453	Name plate 203FE	
48	2	105 958	Name plate 205FCC	
48	2	105 547	Name plate 205TCC	205TCC
49	8	829 845	Screw	"
50	1	103 349	Slide	"
51	2	820 781	Screw	"
52	2	829 760	Screw	"
53	1	103 846	Tripod socket	"
54	1	105 514	Spacer	"

203FE - 205FCC - 205TCC



Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1		Battery	6 volt, type PX28 Lithium
2	1	103 043	Battery compartment	
3	1	22 470	Socket cap	
4	3	820 645	Screw	
5	1	105 513	Leather	
6	1	103 536	Index	
7	2	829 335	Screw	
8	1	105 512	Leather	
9	1	105 304	Cover	
10	2	105 536	Indicator	
11	1	105 127	Adjustment button	
12	1	105 522	Ring	
13	1	107 456	Mode sign 203FE	
	1	105 914	Mode sign 205FCC	
	1	105 955	Mode sign 205TCC	
14	1	107 464	Tape	
15	1	105 119	Mode selector	
16	2	809 020	Steel ball	
17	1	815 510	Spring	
18	1	105 369	Display button	
19	2	815 507	Spring	
20	1	105 374	Plate	
21	3	105 520	Screw	
22	2	105 765	Nut	
23	2	105 833	Spring washer	
24	2	810 639	Washer	
25	2	105 521	Screw	

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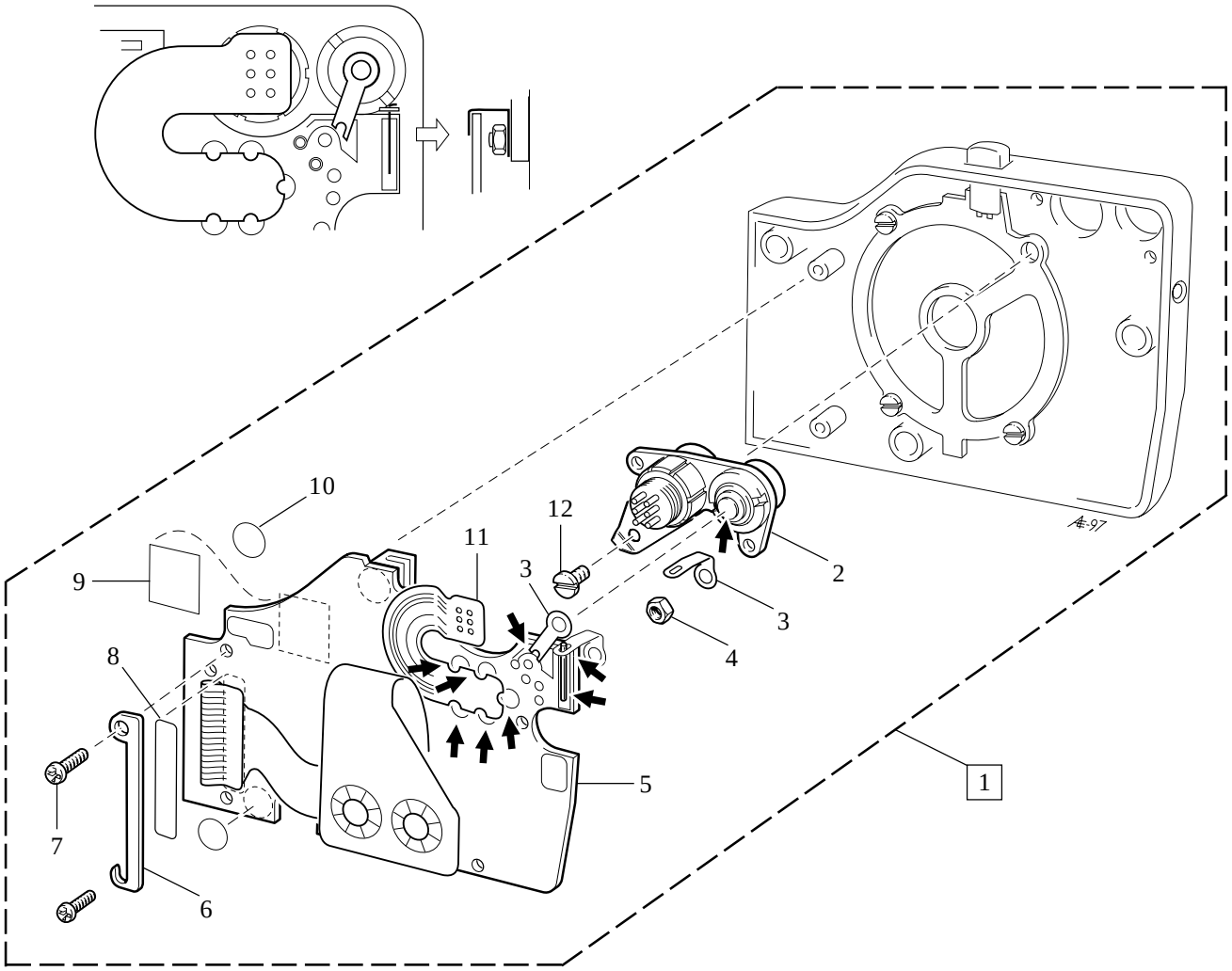
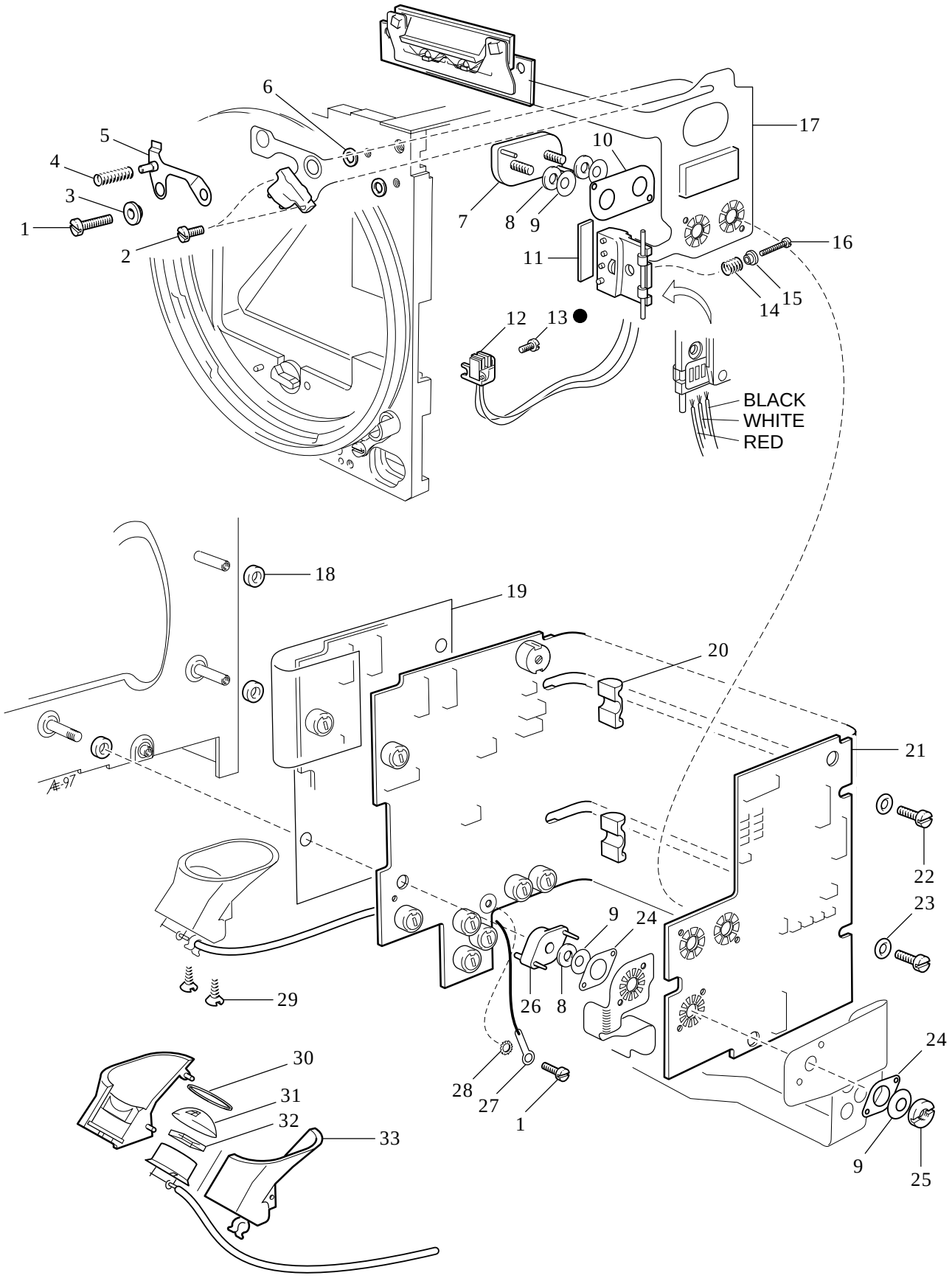


= Solder points

Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	105 021	Control panel	Mode sign not incl.
2	1	107 394	Sync terminal	
3	2	105 861	Soldering tag	Plain
4	1	828 301	Nut	
5	1	105 524	Circuit board	
6	1	105 918	Holder	
7	2	105 622	Screw	
8	1	107 405	Insulation tape	
9	1	105 896	Insulation plate	
10	2	105 916	Insulation plate	
11	1	105 866	SCA flex	
12	1	105 520	Screw	

203FE - 205FCC - 205TCC

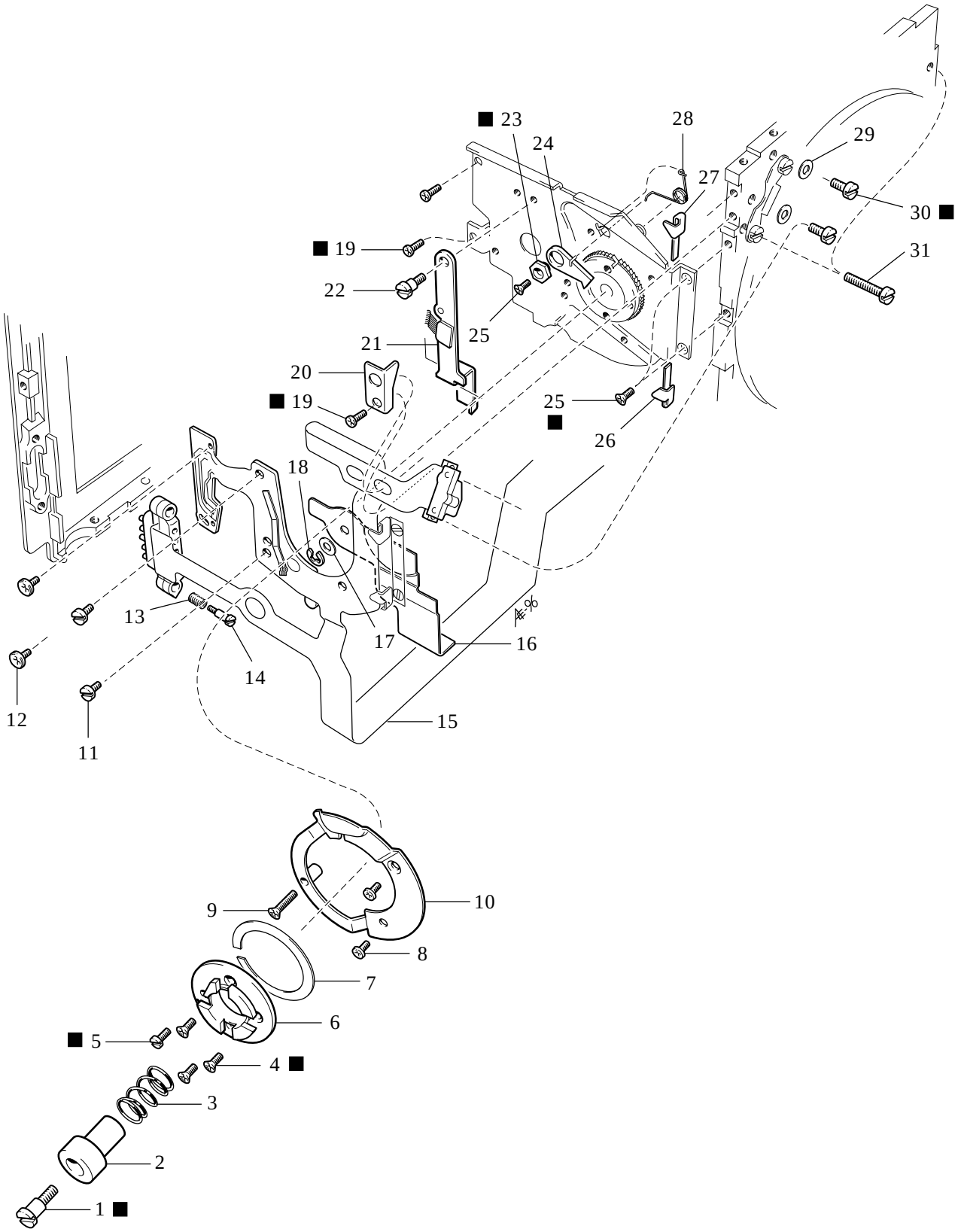


● = Loctite 225

Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	2	820 439	Screw	
2	2	820 440	Screw	
3	1	105 430	Bushing	
4	1	815 614	Spring	
5	1	107 449	Display contact	
6	2	810 542	Washer	Alternatively none or 2 pcs 810542 - 810545
7	1	105 154	Support	
8	3	105 834	Washer	
9	4	105 833	Spring washer	
10	1	105 931	Washer	
11	1	107 906	Reflection protector	
12	1	107 444	Front key switch	
13	1	820 430	Screw	
14	1	815 862	Spring	
15	1	105 430	Bushing	
16	1	820 480	Screw	
17	1	105 047	Display flex	
18	3	810 634	Spacer	
19	1	105 883	Insulation foil	
20	2	105 842	Spacer	
21	1	107 103	Main circuit board 203FE	Part No. 107468 for 205FCC Part No. 105860 for 205TCC
22	2	821 615	Screw	
23	2	107 421	O-ring	
24	2	105 932	Washer	
25	1	105 765	Nut	
26	1	105 625	Support	
27	1	105 861	Soldering tag	
28	1	810 407	Locking washer	
29	2	826 008	Screw	
30	1	105 772	Ring	
31	1	105 403	Lens	
32	1	105 431	Filter	
33	1	105 306	Housing	

203FE - 205FCC - 205TCC

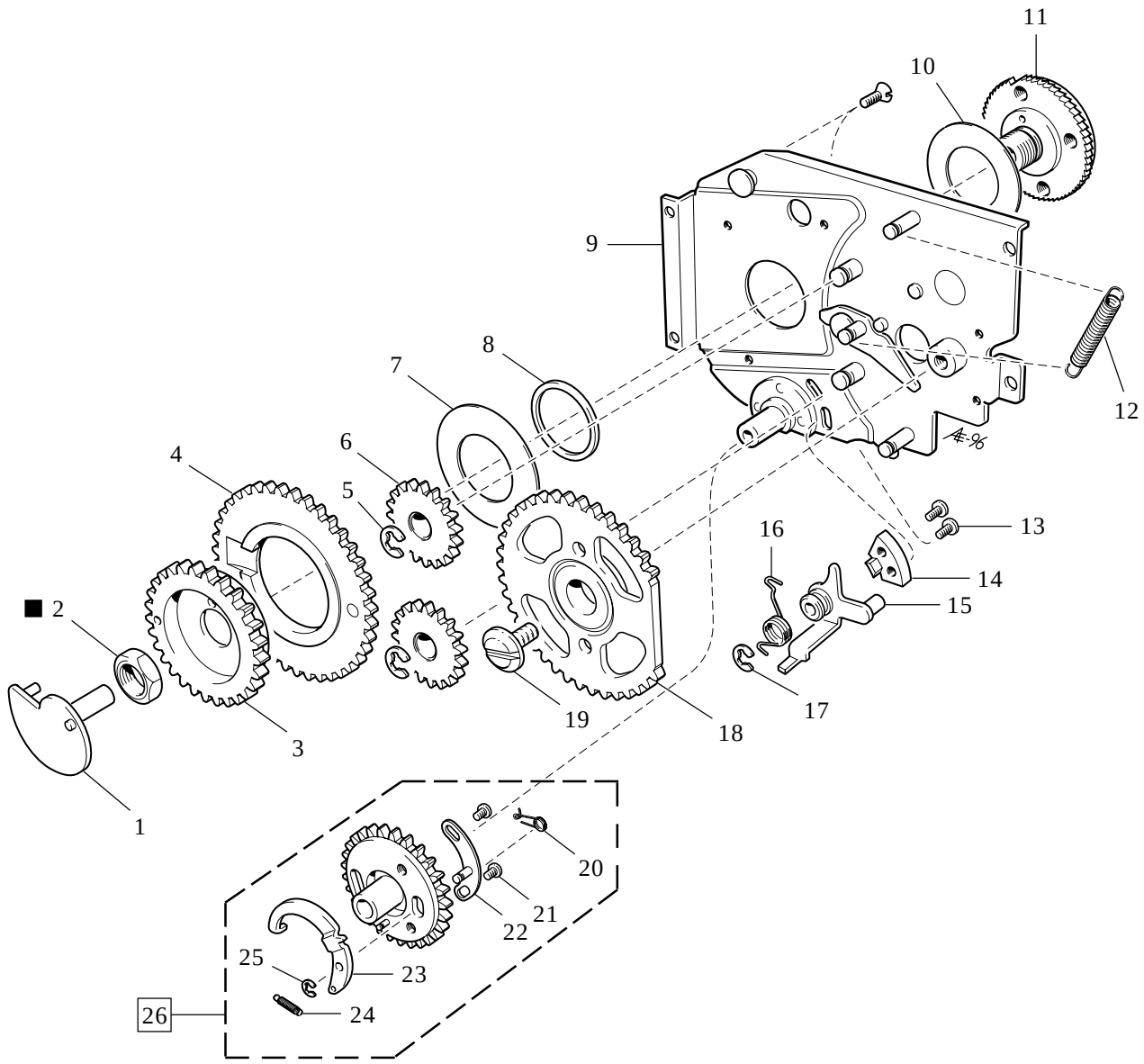


■ = Loctite 243

Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	822 606	Screw	
2	1	105 669	Double exposure button	
3	1	815 807	Spring	
4	3	829 640	Screw	
5	1	821 664	Screw	
6	1	105 766	Coupling	
7	1	105 750	Insulation foil	
8	2	830 620	Screw	
9	1	829 150	Screw	
10	1	105 769	Cover plate	
11	2	820 325	Screw	
12	2	830 020	Screw	
13	1	815 511	Spring	
14	1	105 412	Screw	
15	1	105 057	Contact flex	
16	1	105 360	Cover plate	
17	1	810 601	Washer	Alternatively none or 1 pc 810601 - 603, 607, 609
18	1	817 119	Clip	
19	3	830 235	Screw	
20	1	105 448	Holder	
21	1	105 105	Release arm	Old type, Part No. 105106
22	1	822 436	Screw	
23	1	103 472	Eccentric	
24	1	103 471	Catch	
25	3	829 435	Screw	
26	1	105 832	Clip, lower	
27	1	105 831	Clip, higher	
28	1	816 717	Spring	
29	2	810 542	Washer	Alternatively none or 2 pcs 810542 - 810545
30	2	820 440	Screw	
31	2	820 490	Screw	

203FE - 205FCC - 205TCC

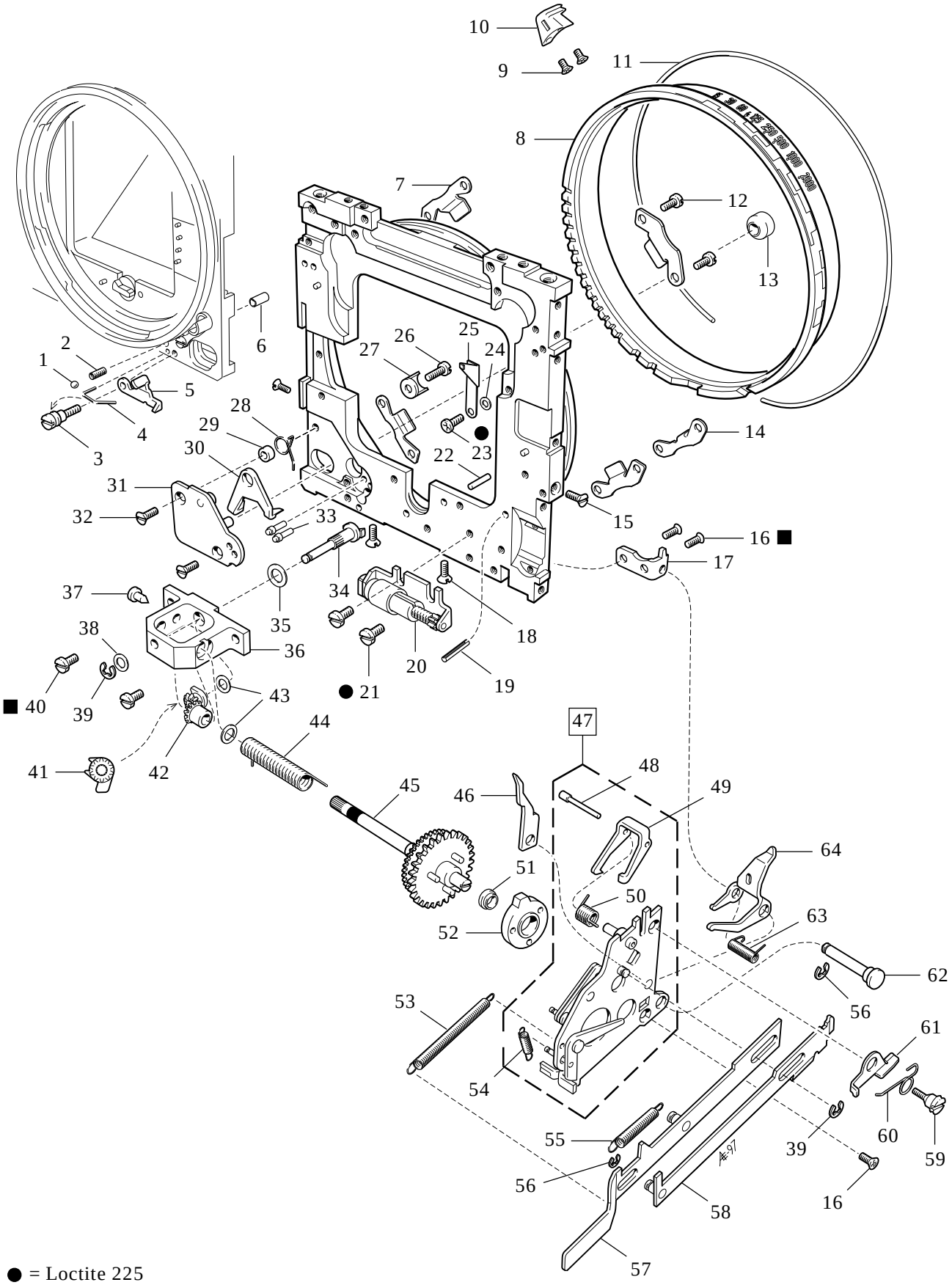


■ = Loctite 243

Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	105 670	Cam	
2	1	828 901	Nut	
3	1	103 482	Gear	
4	1	103 231	Gear	
5	2	817 119	Clip	
6	2	103 228	Gear	
7	1	810 940	Teflon washer, 0.15mm	
8	1	103 498	Ring	
9	1	105 053	Transport mechanism plate	
10	1	810 948	Teflon washer, 0.12mm	
11	1	105 677	Winding knob centre	
12	1	814 859	Spring	
13	2	830 025	Screw	
14	1	103 473	Disengagement tooth	
15	1	105 110	Arm	
16	1	816 763	Spring	
17	1	817 115	Clip	
18	1	103 136	Gear	
19	1	821 730	Screw	
20	1	816 512	Spring	
21	2	830 216	Screw	
22	1	103 247	Support	
23	1	103 620	Catch	
24	1	814 312	Spring	
25	1	817 112	Clip	
26	1	105 108	Gear, complete	
		105 039	Transport mechanism plate	Complete

203FE - 205FCC - 205TCC



● = Loctite 225

■ = Loctite 243

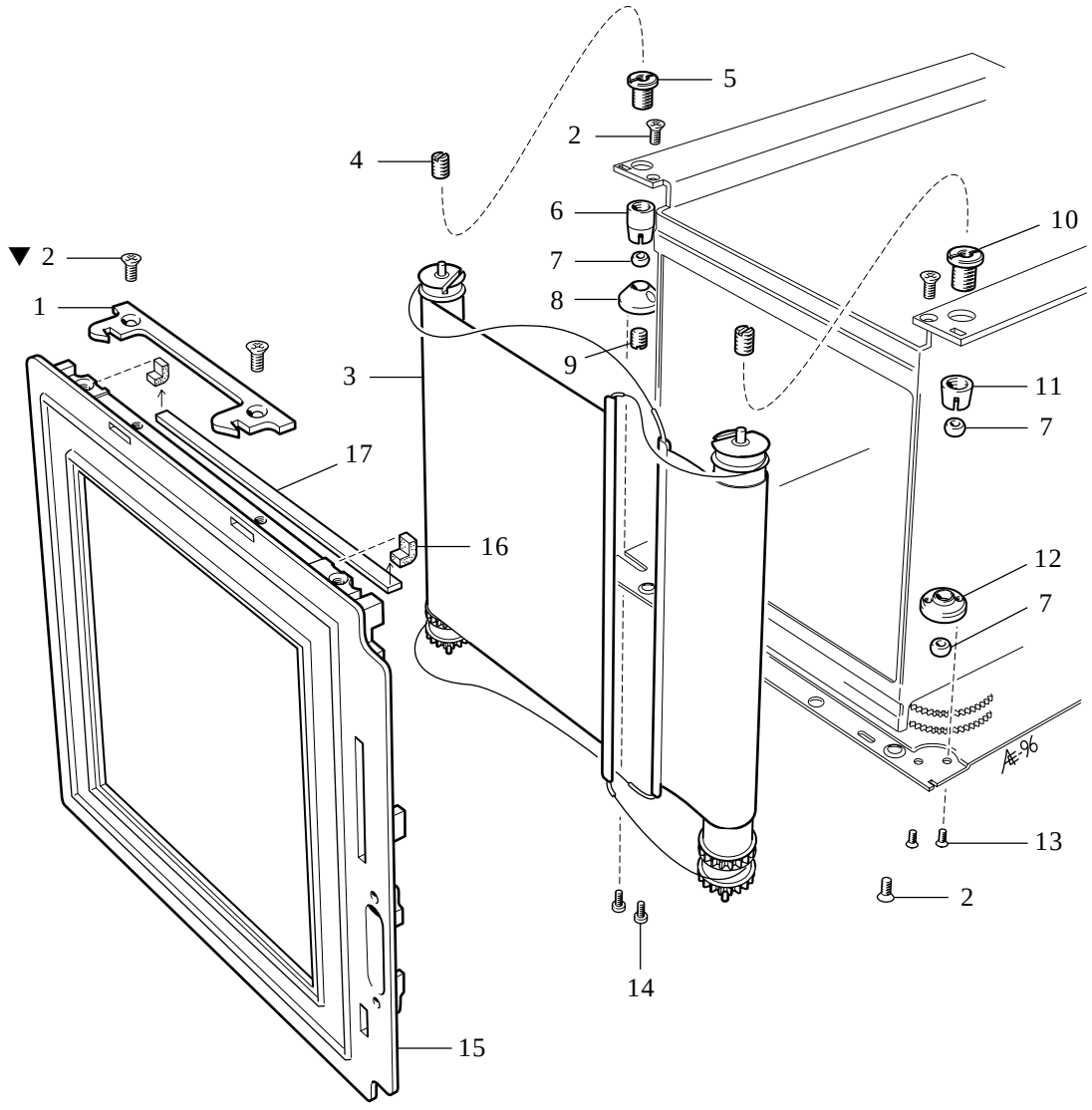
Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	809 020	Steel ball	
2	1	815 507	Spring	
3	1	822 434	Screw	
4	1	105 415	Spring	
5	1	105 363	Catch	
6	1	105 499	Steel ball retainer	
7	4	105 944	Bayonet flange	
8	1	105 134	Speed ring	
9	2	826 002	Screw	
10	1	103 414	Grip	
11	1	103 438	Teflon tube	
12	8	820 425	Screw	
13	1	103 773	Teflon button	
14	1	105 455	Stop	
15	2	823 435	Screw	
16	3	829 435	Screw	
17	1	107 408	Bracket	
18	2	823 635	Screw	
19	1	811 101	Pin	
20	1	103 045	Centrifugal brake	
21	2	820 440	Screw	
22	1	812 202	Pin	
23	1	830 225	Screw	
24	1	810 405	Washer	
25	1	107 430	Mirror catch	
26	1	820 430	Screw	
27	1	105 454	Stopper	
28	1	816 858	Spring	
29	1	810 409	Spacer	
30	1	103 440	Lens catch	
31	1	105 107	Cover plate	
32	2	823 440	Screw	
33	2	836 107	Pin	
34	1	107 367	Key	
35	1	810 702	Washer	
36	1	103 352	Bracket	
37	1	105 525	Stop	
38	1	810 506	Washer	
39	2	817 115	Clip	
40	2	820 435	Screw	
41	1	105 120	Bevel gear	
42	1	103 556	Bevel gear	
43	2	810 702	Washer	For adjustment 810702 - 705
44	1	816 860	Spring	
45	1	103 124	Gear	
46	1	105 745	B-stop	
47	1	105 817	Release mechanism	
48	1	831 120	Pin	
49	1	103 355	Front key catch	
50	1	816 756	Spring	
51	1	103 442	Bearing	
52	1	103 441	Stop	
53	1	814 609	Spring	

Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
54	1	814 505	Spring	
55	1	814 807	Spring	
56	2	817 112	Clip	
57	1	105 946	Release lever, rear	
58	1	103 117	Release lever, front	
59	1	822 430	Screw	
60	1	105 836	Spring	
61	1	105 835	Exposure catch	
62	1	107 407	Shaft	
63	1	816 716	Spring	
64	1	105 947	Release bridge	
		105 023	Front bayonet plate, compl.	Incl. Display flex, Part No. 105047

203FE - 205FCC - 205TCC

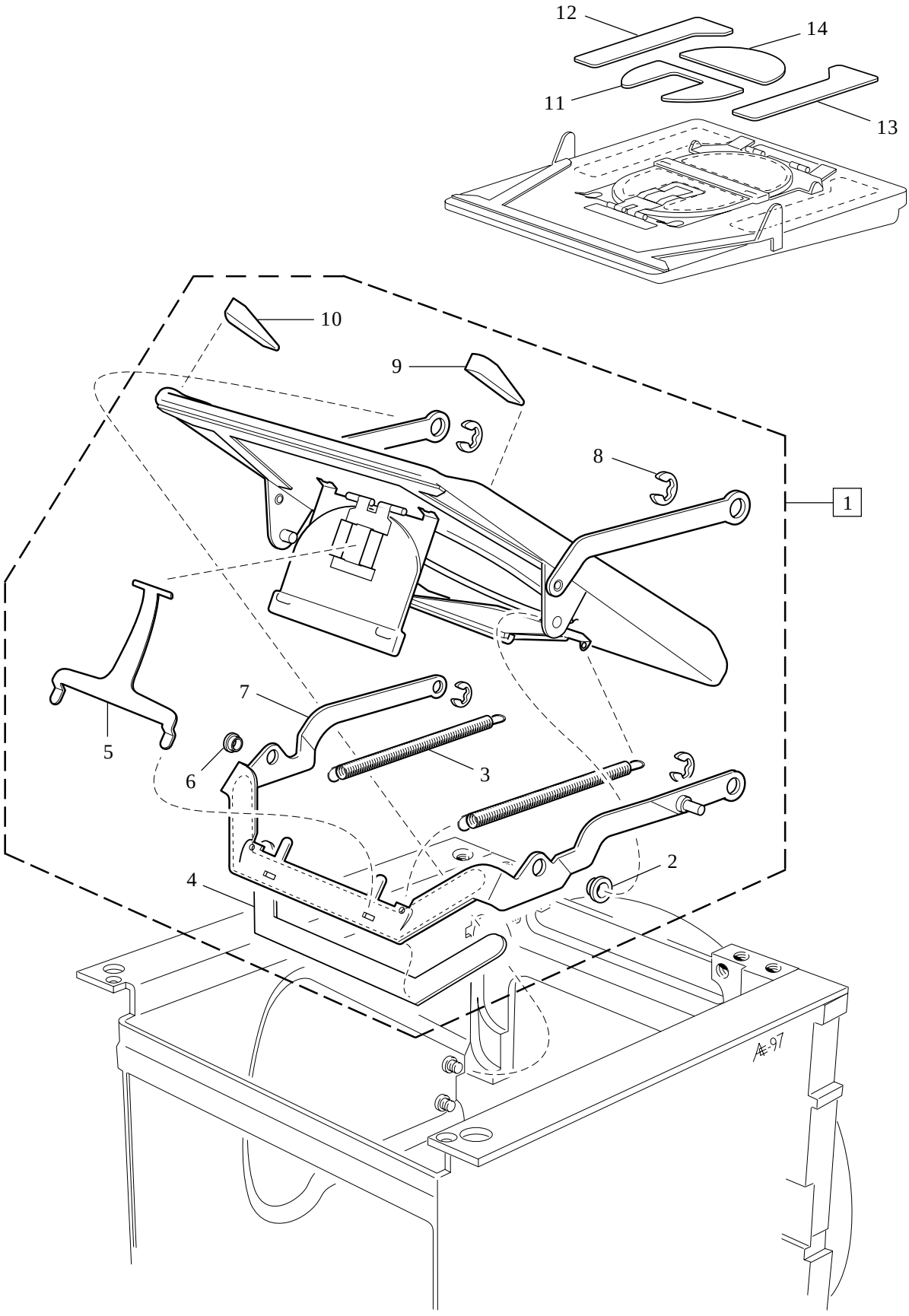


▼ = Loctite 638

Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	22 423	Magazine hook	
2	6	829 535	Screw	
3	1	107 359	Curtain set	
4	2	103 854	Screw	
5	1	103 837	Nut	
6	1	103 080	Holder	
7	3	103 839	Bearing	
8	1	103 858	Holder	
9	1	105 933	Screw	
10	1	103 838	Nut	
11	1	103 079	Holder	
12	1	103 081	Holder	
13	2	829 316	Screw	
14	2	830 620	Screw	
15	1	105 301	Rear plate	Please state serial No.
16	2	105 943	Light seal	
17	1	103 735	Light seal	

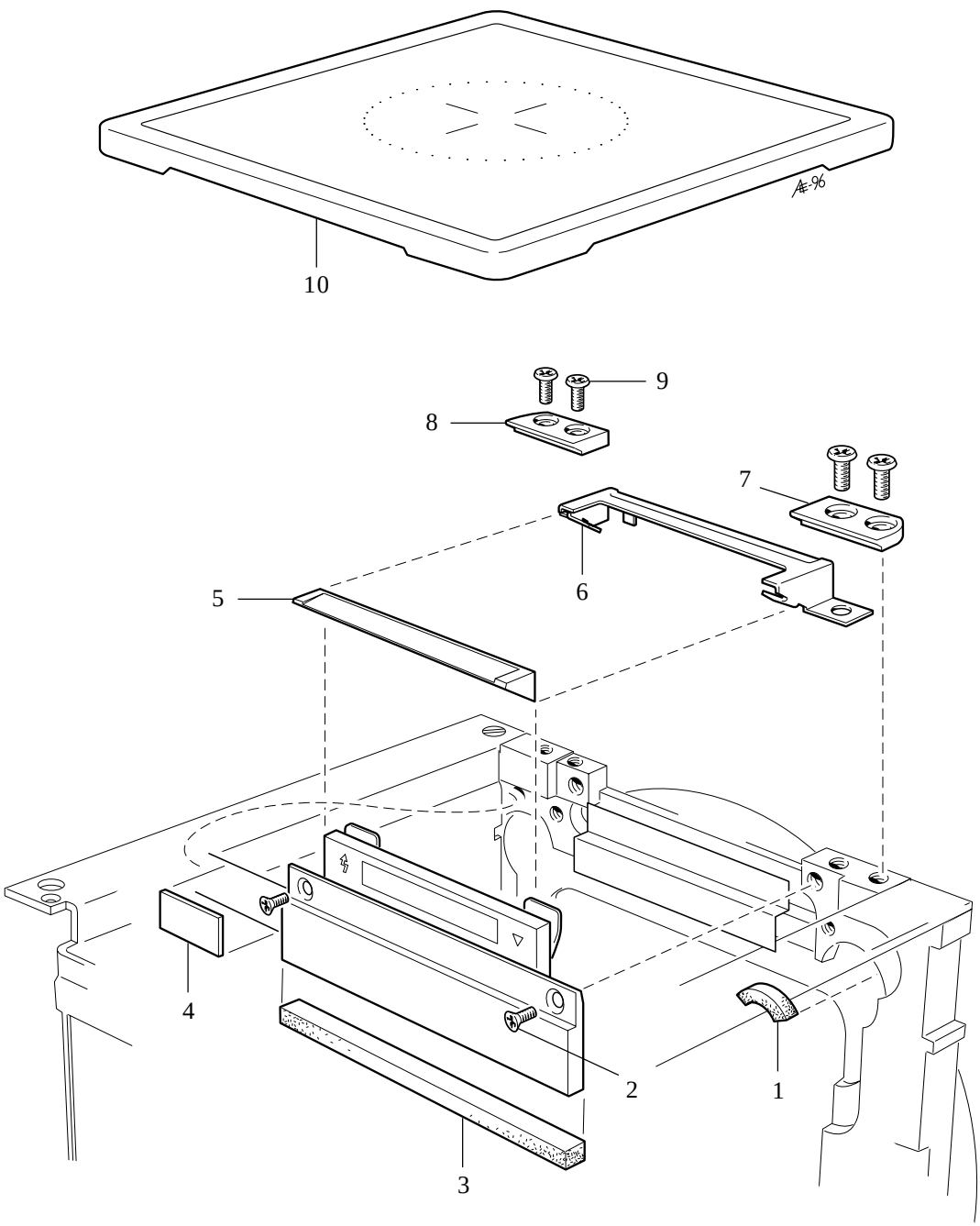
203FE - 205FCC - 205TCC



Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	107 044	Mirror assembly 203FE	Part No. 105044 for 205FCC/TCC
2	1	108 409	Bushing	
3	2	814 319	Spring	
4	1	108 904	Reflection protector	
5	1	105 438	T-spring	
6	1	105 889	Bushing	
7	1	105 128	Mirror yoke	
8	4	817 115	Clip	
9	1	105 929	Back stop, right	
10	1	105 930	Back stop, left	
11	1	107 903	Reflection protector	
12	1	107 904	Reflection protector, right	
13	1	107 901	Reflection protector, left	
14	1	107 902	Reflection protector	

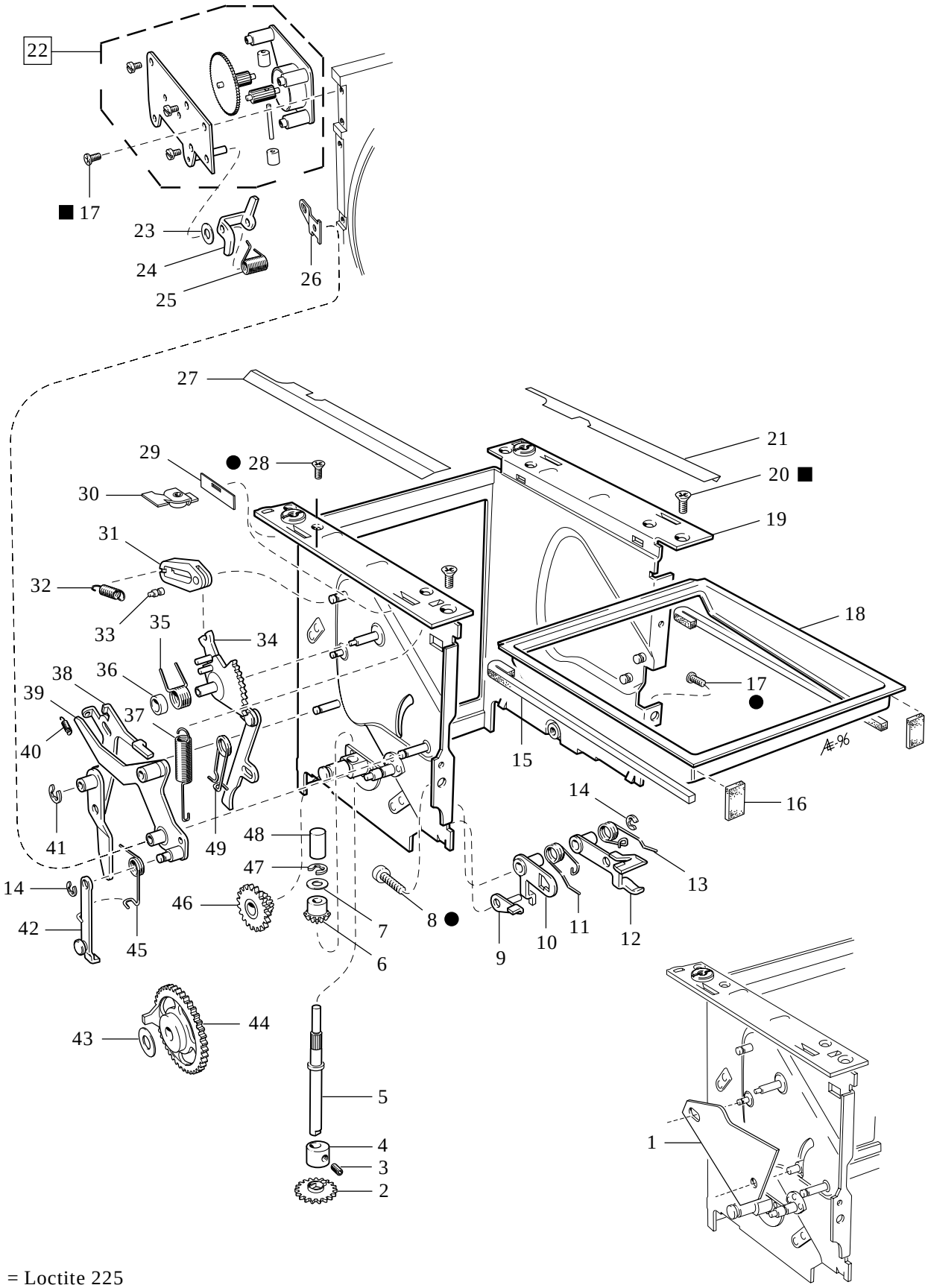
203FE - 205FCC - 205TCC



Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	105 941	Light seal	
2	2	829 435	Screw	
3	1	105 459	Light seal	
4	1	105 940	Light seal	
5	1	105 358	Display prism	
6	1	105 350	Prism holder	
7	1	105 458	Holder, right	
8	1	105 474	Holder, left	
9	4	830 235	Screw	
10	1		Acute-Matte D 203	Sales code No. 42210
			Acute-Matte D 205	Sales code No. 42213

203FE - 205FCC - 205TCC



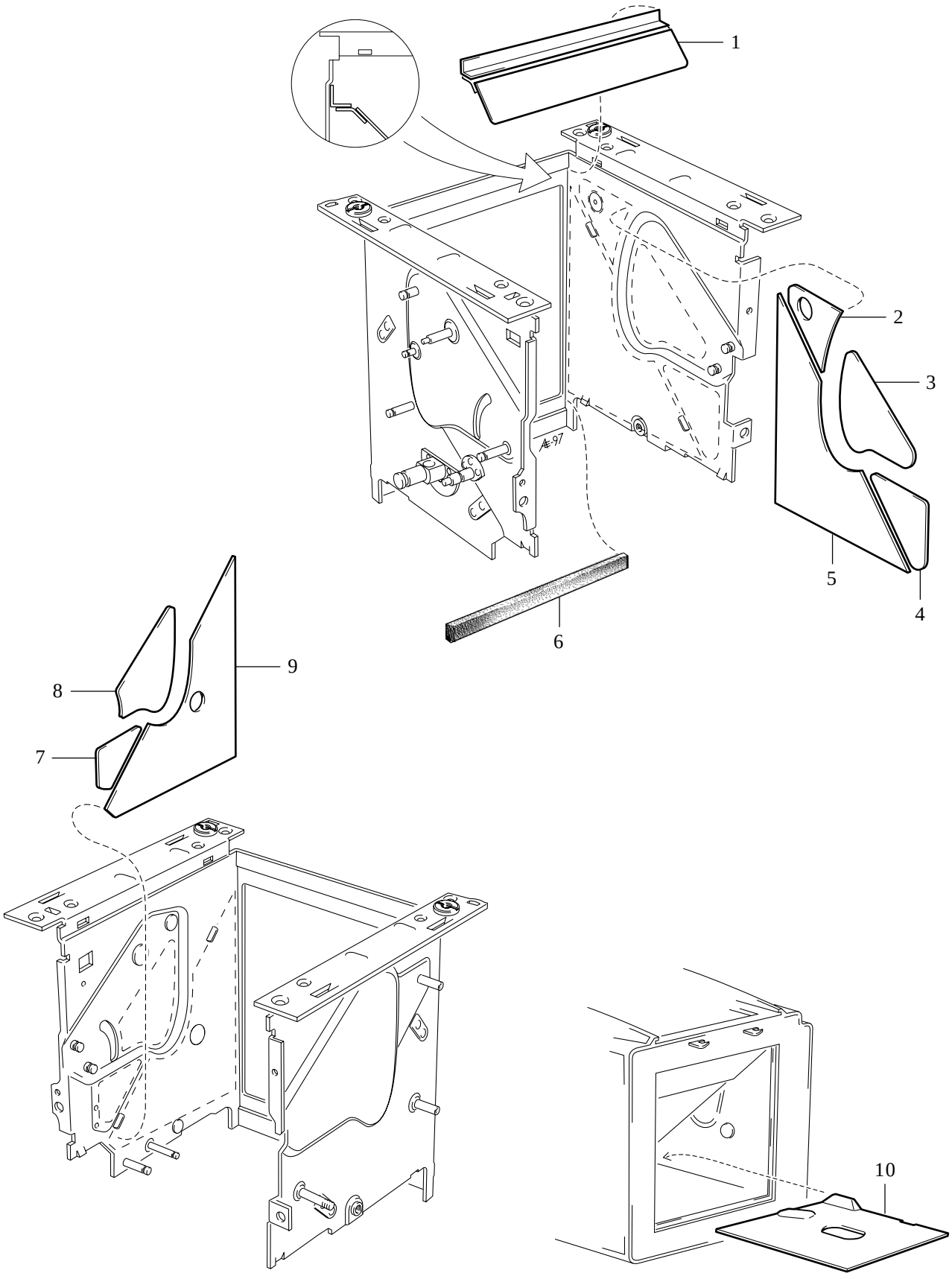
● = Loctite 225

■ = Loctite 243

Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	107 399	Light seal	
2	1	103 404	Gear	
3	1	825 660	Screw	
4	1	107 416	Eccentric	
5	1	105 923	Drive shaft	
6	1	103 556	Bevel gear	
7	1	810 618	Washer	
8	1	821 407	Screw	
9	1	103 200	Arm	
10	1	103 199	Release lever	
11	1	816 754	Spring	
12	1	105 741	Release lever	
13	1	816 755	Spring	
14	2	817 112	Clip	
15	2	103 453	Light seal	
16	2	105 942	Light seal	
17	2	830 235	Screw	
18	1	105 130	Screen frame	
19	1	105 022	Chassis	
20	2	829 535	Screw	
21	1	103 583	Foil, left	
22	1	107 372	Brake	
23	1	810 315	Washer	
24	1	107 365	Lever	
25	1	816 816	Spring	
26	1	103 545	Support	
27	1	103 576	Foil, right	
28	4	829 330	Screw	
29	4	103 578	Foil	
30	4	103 118	Screen support	
31	1	103 401	Flip-flop	
32	1	814 714	Spring	
33	1	103 407	Pivot	
34	1	105 887	Actuating lever	
35	1	816 760	Spring	
36	1	810 619	Spacer	
37	1	814 901	Spring	
38	1	105 707	Release lever	
39	1	105 756	Driving arm	
40	1	814 501	Spring	
41	1	817 115	Clip	
42	1	105 757	B-arm	
43	1	810 210	Washer	
44	1	105 109	Gear	
45	1	816 514	Spring	
46	1	105 863	Gear	
47	1	817 119	Clip	
48	1	103 495	Rubber stop	
49	1	816 613	Spring	

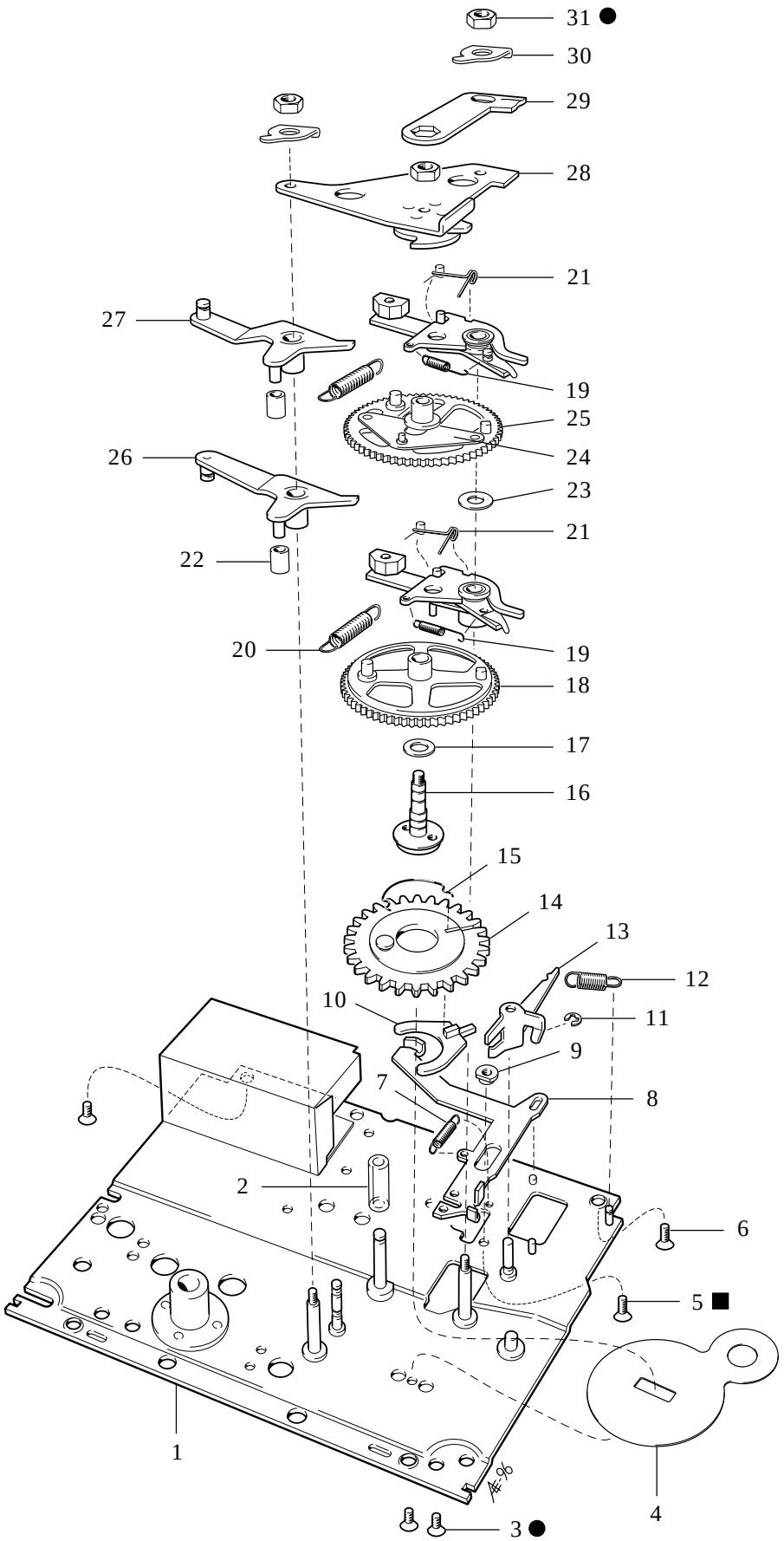
203FE - 205FCC - 205TCC



Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	105 133	Light seal foil	
2	1	105 531	Reflection protector, left	
3	1	108 801	Reflection protector, left	
4	1	108 802	Reflection protector, left	
5	1	103 696	Reflection protector, left	
6	1	103 453	Light seal	
7	1	108 804	Reflection protector, right	
8	1	108 803	Reflection protector, right	
9	1	103 698	Reflection protector, right	
10	1	105 125	Inner cover	

203FE - 205FCC - 205TCC



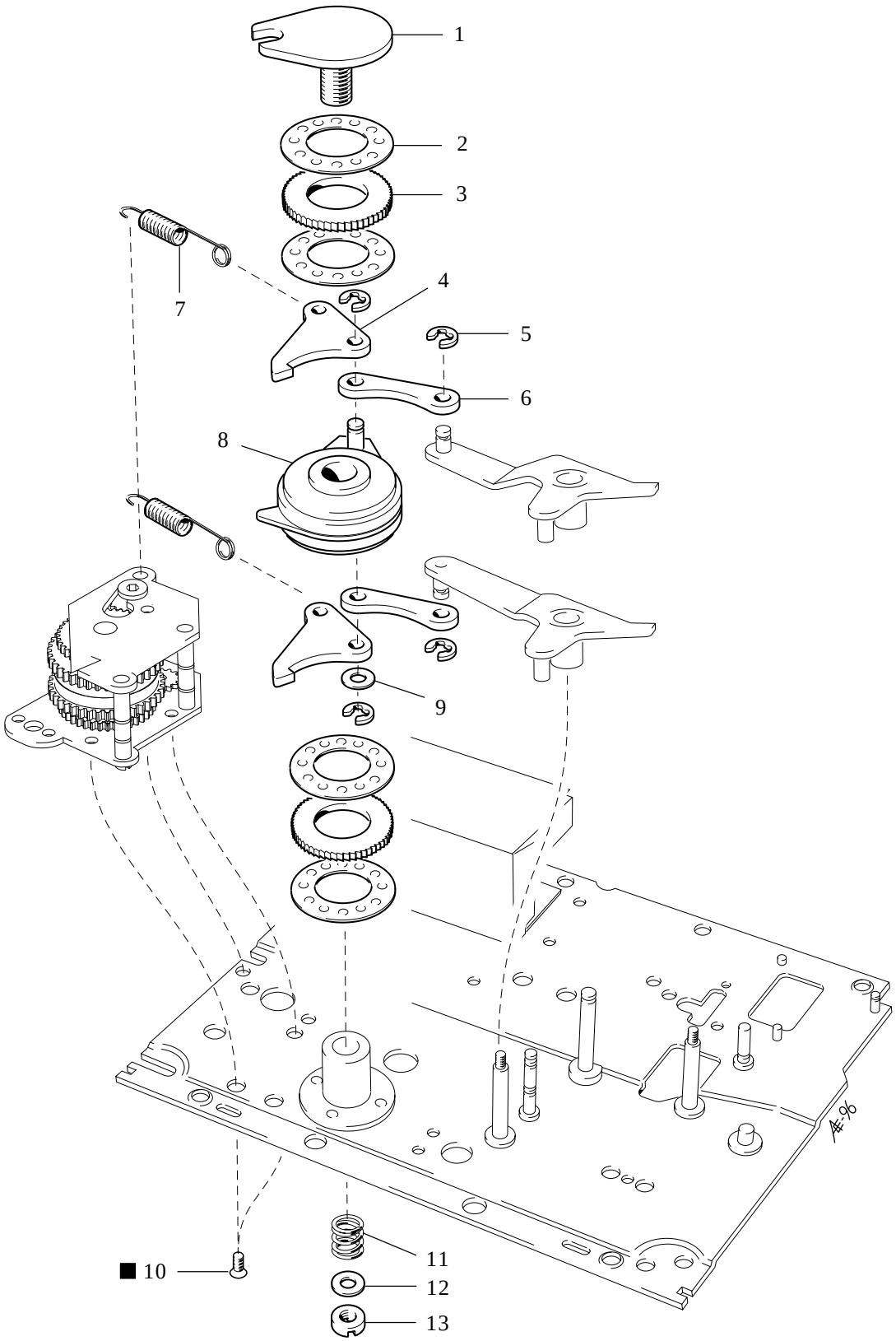
● = Loctite 225

■ = Loctite 243

Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	105 049	Mechanism plate	
2	1	810 557	Sleeve	
3	2	829 316	Screw	
4	1	103 687	Foil	
5	1	829 425	Screw	
6	2	829 535	Screw	
7	1	814 312	Spring	
8	1	103 389	Release arm	
9	1	105 742	Bushing	
10	1	103 445	Catch	
11	1	817 112	Clip	
12	1	814 608	Spring	
13	1	103 390	Release arm	
14	1	103 132	Cocking gear	
15	1	103 446	Spring	
16	1	103 850	Shaft	
17	1	810 618	Washer	
18	1	103 126	Shutter gear, 1st	
19	2	814 313	Spring	
20	2	814 710	Spring	
21	2	107 447	Spring	
22	2	810 317	Shrink sleeve	
23	1	810 525	Washer	Alternatively none
24	1	105 920	Guiding plate	
25	1	105 706	Shutter gear, 2nd	
26	1	105 702	Stop lever, 1st	
27	1	105 703	Stop lever, 2nd	
28	1	105 705	Bridge	
29	1	103 851	Support	
30	2	103 849	Locking plate	
31	3	828 402	Nut	
		105 028	Bottom mechanism plate	Complete

203FE - 205FCC - 205TCC

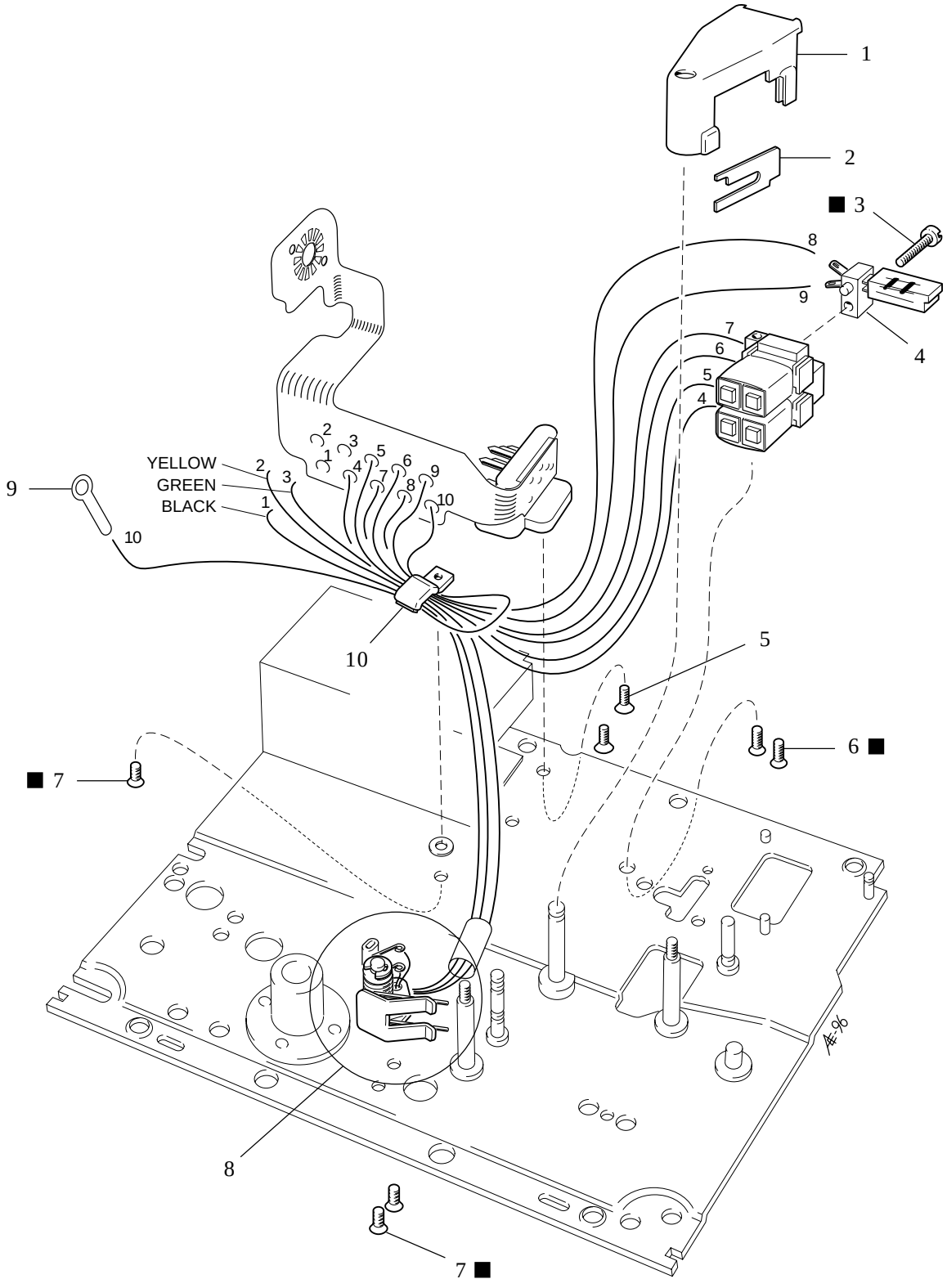


■ = Loctite 243

Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	107 354	Holder	
2	4	105 743	Brake disc	
3	2	105 686	Brake plate	
4	2	107 356	Catch	
5	4	817 112	Clip	
6	2	105 694	Link	
7	2	814 526	Spring	
8	1	105 952	Support	
9	1	810 315	Washer	Alternatively none
10	3	829 425	Screw	
11	1	815 908	Spring	
12	1	810 703	Washer	
13	1	105 690	Nut	

203FE - 205FCC - 205TCC

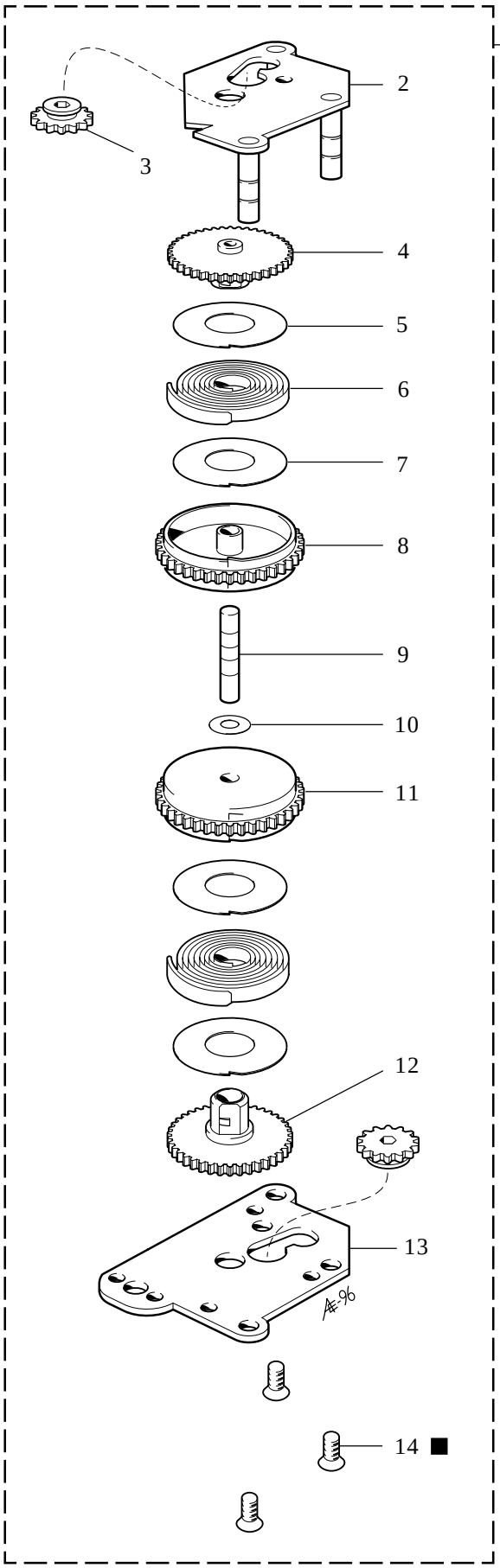


■ = Loctite 243

Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	105 307	Cover	
2	1	105 683	Cover	
3	1	830 260	Screw	
4	1	105 748	Late release switch	
5	2	829 335	Screw	
6	2	826 002	Screw	
7	2	829 425	Screw	
8	1	107 362	Sync switch assembly	
9	1	105 861	Soldering tag	
10	1	105 904	Cable holder	
		105 028	Bottom mechanism plate	Complete

203FE - 205FCC - 205TCC

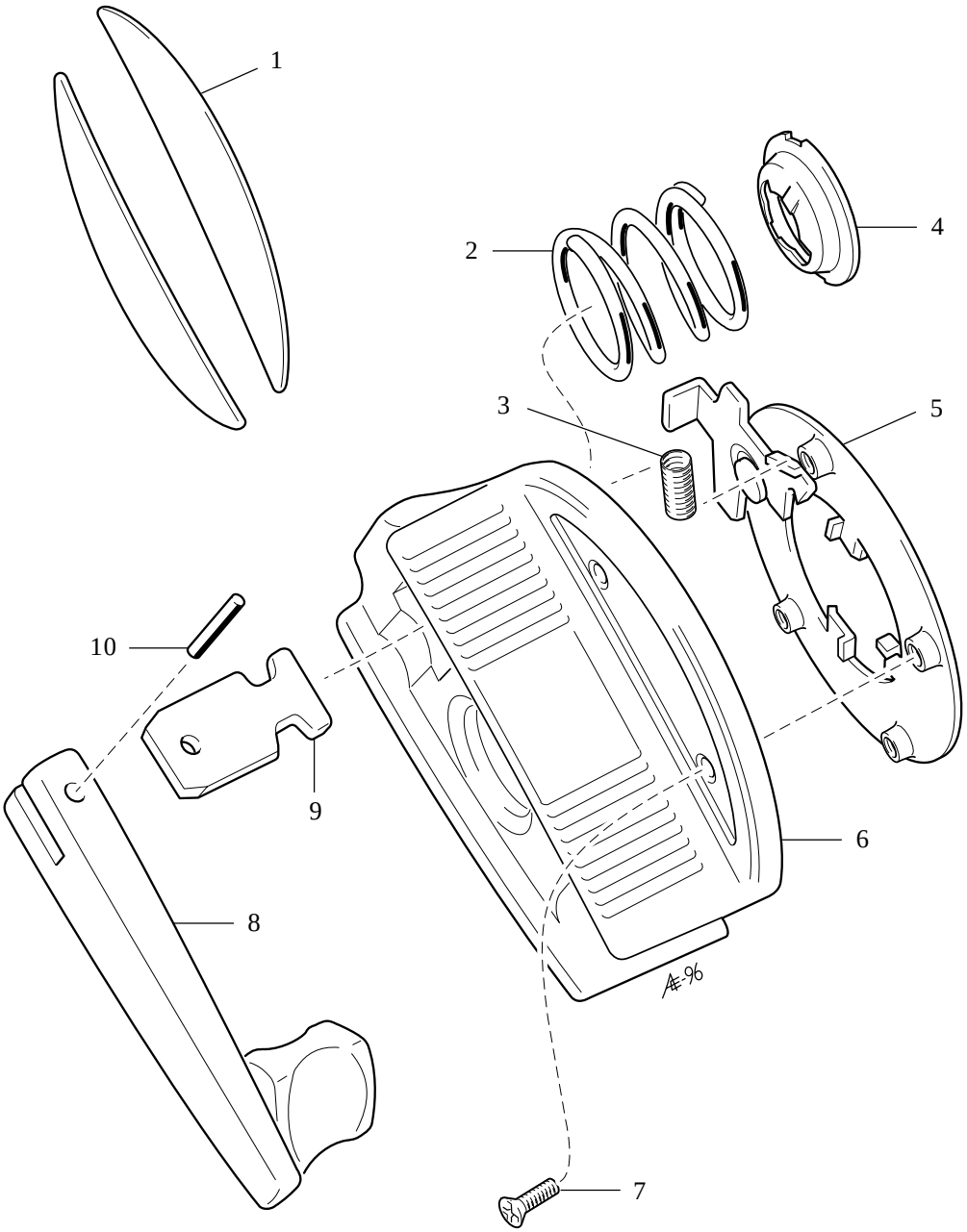


■ = Loctite 243

Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	107 345	Spring housing complete	
2	1	105 676	Base plate	
3	2	103 585	Locking gear	
4	1	107 347	Spring centre, 1st	
5	2	810 839	Washer	
6	2	105 675	Spring	
7	2	105 711	Washer	
8	1	105 708	Drive gear, 1st	
9	1	105 673	Shaft	
10	1	810 550	Washer	
11	1	105 709	Drive gear, 2nd	
12	1	107 348	Spring centre, 2nd	
13	1	105 339	Cover plate	
14	3	829 425	Screw	

203FE - 205FCC - 205TCC

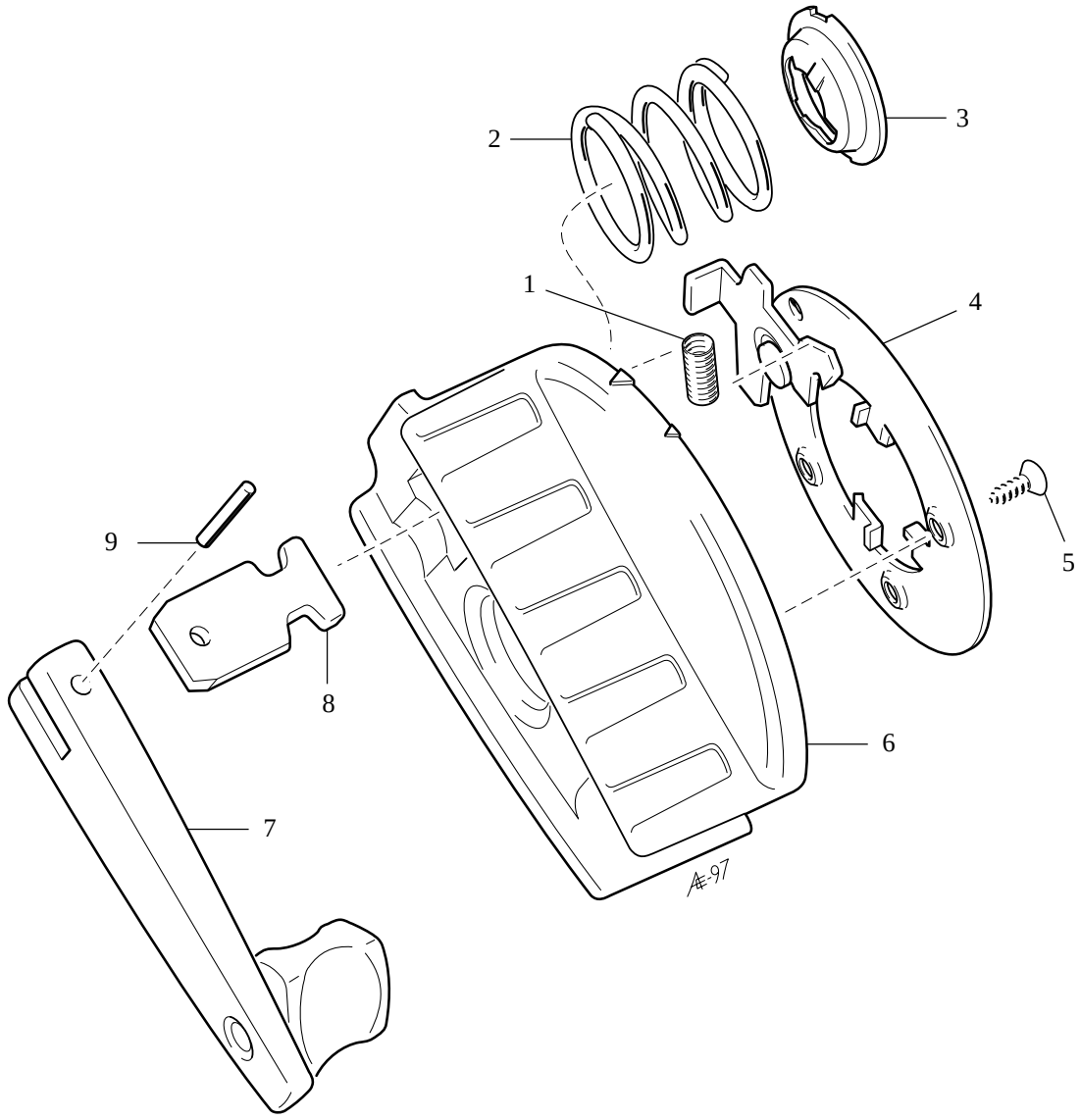


Camera body 203FE - 205FCC - 205TCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	2	103 517	Leather	
2	1	815 904	Spring	
3	1	815 707	Spring	
4	1	103 516	Washer	
5	1	103 113	Crank bayonet	
6	1	107 409	Crank support	
7	4	829 540	Screw	
8	1	103 151	Crank arm	
9	1	103 514	Slide	
10	1	812 301	Pin	

203FE From serial No. 18ET10992

205FCC From serial No. 15EU10053



Camera body 203FE - 205FCC

Pos No.	Pcs	Spare Part No.	Description	Remark
1	1	815 707	Spring	
2	1	815 904	Spring	
3	1	103 516	Washer	
4	1	412 105	Crank bayonet	
5	3	826 401	Screw	
6	1	412 323	Crank support	
7	1	412 104	Crank arm	
8	1	103 514	Slide	
9	1	812 301	Pin	